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BALCONY

Journal of
the Medical
Society of

New Jersey

Occupational Hearing Loss
W. A. Petryshyn, M.D.

Solitary Breast Mass
*M. H. Seltzer, M.D. and
H. S. Fletcher, M.D.*

Gender Dysphoria Program
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Quality Graduate Education
in Family Medicine
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WRITE FOR REPRINT: R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioğlu, M.D.: Hormones for Improved Sexuality in the Male and Female Climacteric. *Drug Therapy*, Sept. 1976.

Is there a true aphrodisiac? How effective are androgens in the management of the male climacteric and male impotence? Article discusses the psychophysiological and hormonal changes in the elderly male and female and therapeutic considerations. The effectiveness of methyltestosterone in the management of male impotence was confirmed by a cross-over, double-blind study using a placebo and Android-25

(methyltestosterone 25 mg.), on 20 males, 50 years of age or older who complained of secondary impotence. Patients received a series of placebo then Android-25, or Android-25 then placebo as follows: 1 tablet/30 days; 2 tablets/30 days; 3 tablets/30 days. Sexual response was evaluated: 0 = no change; + = 25% improvement; ++ = 50% improvement; +++ = 75% improvement. Placebo effectiveness was – or ++ in 12.7% of trials. Android-25 elicited a –, +, ++ or +++ response in 47.2% of trials. There was often a dose related response not observed with the placebo. This effect was not observed in younger patients (age 28-45 years).

DESCRIPTION: Methyltestosterone is 17 β -Hydroxy-17-Methylandrosta-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunuchism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-pubertal cryptorchidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric,

avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE**

REACTIONS: Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. In the male: Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpubertal cryptorchidism, 30 mg. **REFERENCE:** Robert B. Greenblatt, M.D., and D. H. Perez, M.D.: "The Menopausal Syndrome," *Problems of Libido in the Elderly*, pp. 95-101. Medcom Press, N.Y., 1974. **HOW SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

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*First Health and Nutrition Examination Survey, DHEW Pub. No. (HRA) 74-1119-1, National Center for Health Statistics, Rockville, Maryland

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A pharmacokinetic character all its own

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due

to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated:

Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma;

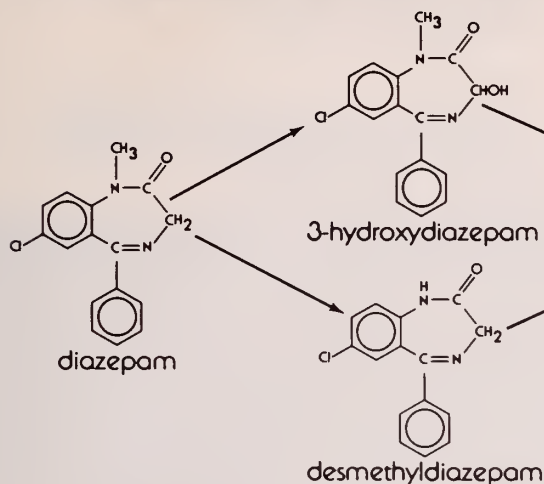
may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Use in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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EDITORIALS

A Precedent Is Set

With the approval of the Medical Inter-Insurance Exchange of New Jersey (see page 61, this issue), our House of Delegates has officially joined The Medical Society of New Jersey with the New Jersey Association of Osteopathic Physicians and Surgeons in a precedent-setting action. Our societies have had professional dealings in the past but this action is the most significant to date.

Since members of both organizations are troubled by problems of professional liability insurance, it is right that a plan be devised "to offer nonassessable professional liability insurance on an occurrence basis to all allopathic and osteopathic physicians in the State of New Jersey" who meet the standards and requirements of the program.

A.K.

Of Mice and Men*

There comes a time in every man's emphysema when he must cough up a few remarks. These remarks are directed at two groups in our membership, the "hackers" and the "mice." The "hackers," with the exception of the Board of Trustees' meetings, casually light up their favorite weed at any meeting of any component group of the Society in spite of Resolution 19 (1975), which stated, "Resolved that smoking of any material shall be prohibited in all deliberative meetings of *all* official bodies connected with The Medical Society of New Jersey." (*Italics mine*)

The "mice": all of us (probably 70 percent) who don't smoke and simply tolerate the nasal and lacrimal irritation because we don't want to offend our pals—or are they! The *New York Times Sunday Magazine* for September 26,

*With apologies to the late John Steinbeck.

1976 said: "In 1964 the Surgeon General reported that 52.4 percent of all males over 21 smoked; by 1975 this percent had dropped to 39.3." Physicians as a group have reduced their smoking more than any other, yet this good resolution, so vehemently passed in 1975, will be violated unless we mice squeak!

Let's gang up on 'em!

Edward G. Bourns, M.D.

The Private Practitioner

The Dodo bird, *Raphus solitarius*, which formerly inhabited the islands of Mauritius, Reunion, and Rodriguez, is extinct. Certain species of whale — the blue, humpback, gray, and "right" whales — are endangered. There is now strong evidence that one species of physician — the private practitioner — also may be destined for extinction!

Ecologists point to a number of factors which endanger a species, including the size of the population, the rate of reproduction, and the activity of unnatural predators (especially man). Numerous environmental factors (pollutants, diseases, variations in temperature, and so on, have the potential for hastening the demise of the species, while individual biological and genetic characteristics also may enhance its susceptibility.

The population of private practitioners always has been considered "smallish." Some argue that this is a statistical artifact and that maldistribution is the real problem. If one uses a ratio of physician-to-population in the inner cities, there is a shortage. If one relates the physician population to the present and potential demand for services, there is a marked shortage. Be that as it may, there is evidence that fewer medical school graduates are interested in private practice; instead, they are leaning toward employment in the armed forces, health maintenance organizations, health centers, in-

dustrial and government medicine, and research. Furthermore, the record shows that many physicians are leaving private practice for early retirement (their reasons include professional liability insurance problems) or are taking "retirement jobs" to reduce the level of pressures. These elements — small population size, departure of practitioners and diminished reproduction of primary physicians in private practice at the medical school and postgraduate level — lend credence to the endangerment thesis.

The whale mainly is endangered by the attack of unnatural predators — man, the fishing industry, and especially "whalers." The private practitioner of medicine (as well as the private practice of medicine) is also being attacked by unnatural predators — some insurance commissioners and other state and federal officials, some congressmen, some union representatives, some lawyers, some insurance intermediaries, most consumer advocates, and, most remarkably, by some patients.

The physician has individual (perhaps biologic and genetic) characteristics which may devastate the ranks of private practice as well. Unlike the

products of the cookie cutter, physicians are individuals and no two are alike. This individuality is coupled with incentive drives — mainly for professional and personal satisfaction — even at the sacrifice of comfort, rest, and recreation on many occasions. If these incentives are taken away and the private practitioner is placed in a position of economic disadvantage by a social system devised by predatory forces, the survival of American Medicine as we have known it is questionable. The environment clearly has become hostile — threats, ingratitude, and interference with practice are the key elements of this hostility.

What can be done to protect the species? The word must go forward to the reasoning members of society and government that there will be a threat to America's health in the absence of private practice. Many individuals need their personal physicians. It is essential to balance a government-controlled network of health care with a private medical care system.

It behooves this nation jealously and zealously to protect private practitioners from extinction. Like the Dodo bird and the endangered whale — once gone they will never return. A.K.

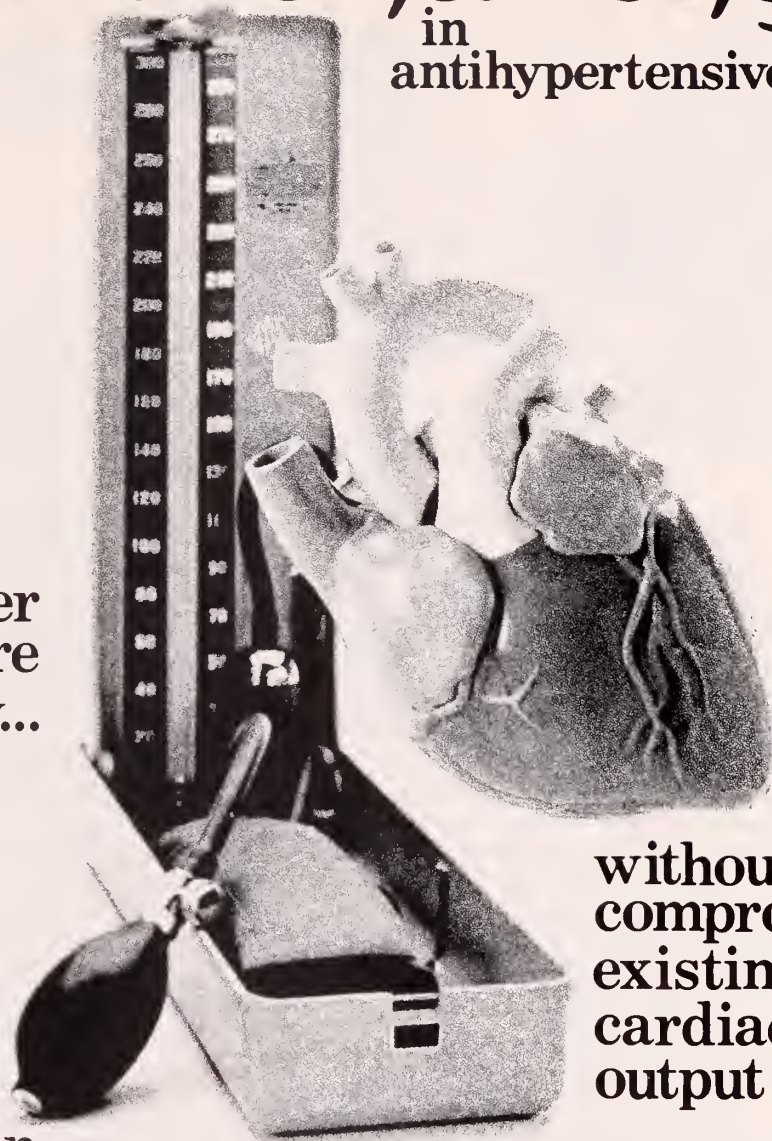
Cover Photo

Our cover photograph depicts the figure of Hippocrates as it stands at the main entrance to the Piscataway campus of the College of Medicine and Dentistry of New Jersey — Rutgers Medical School. The statue was designed and executed by Kostas N. Georgakas from a five-ton, solid piece of white marble, mined from the Mountain of Pendelli in Greece. This is the area which yielded the marble of the Parthenon and the Temple of Acropolis. The nine-foot tall, interpretive yet classical and realistic rendition of the Father of Medicine rests on a seven-foot high base of solid granite, designed by the New Jersey architect, William Chirgotis. The statue was a gift of Peter T. Sideris of Woodbridge, New Jersey.

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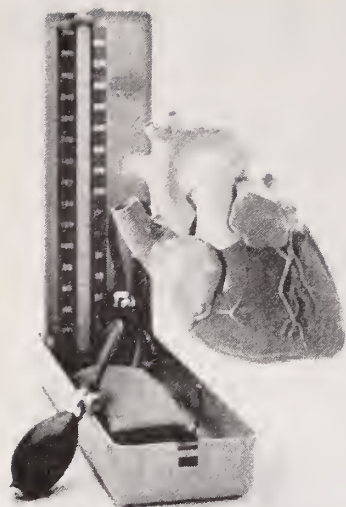
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direct effect on
cardiac function—
cardiac output is
usually maintained

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Warnings: It is important to recognize that a positive Coombs test, hemolytic anemia, and liver disorders may occur with methyldopa therapy. The rare occurrences of hemolytic anemia or liver disorders could lead to potentially fatal complications unless properly recognized and managed. Read this section carefully to understand these reactions.

With prolonged methyldopa therapy, 10% to 20% of patients develop a positive direct Coombs test, usually between 6 and 12 months of therapy. Lowest incidence is at daily dosage of 1 g or less. This on rare occasions may be associated with hemolytic anemia, which could lead to potentially fatal complications. One cannot predict which patients with a positive direct Coombs test may develop hemolytic anemia. Prior existence or development of a positive direct Coombs test is not in itself a contraindication to use of methyldopa. If a positive Coombs test develops during methyldopa therapy, determine whether hemolytic anemia exists and whether the positive Coombs test may be a problem. For example, in addition to a positive direct Coombs test there is less often a positive indirect Coombs test which may interfere with cross matching of blood.

At the start of methyldopa therapy, it is desirable to do a blood count (hematocrit, hemoglobin, or red cell count) for a baseline or to establish whether there is anemia. Periodic blood counts should be done during therapy to detect hemolytic anemia. It may be useful to do a direct Coombs test before therapy and at 6 and 12 months after the start of therapy. If Coombs-positive hemolytic anemia occurs, the cause may be methyldopa and the drug should be discontinued. Usually the anemia remits promptly. If not, corticosteroids may be given and other causes of anemia should be considered. If the hemolytic anemia is related to methyldopa, the drug should not be reinstituted. When methyldopa causes Coombs positivity alone or with hemolytic anemia, the red cell is usually coated with gamma globulin of the IgG (gamma G) class only. The positive Coombs test may not revert to normal until weeks to months after methyldopa is stopped.

Should the need for transfusion arise in a patient receiving methyldopa, both a direct and an indirect Coombs test should be performed on his blood. In the absence of hemolytic anemia, usually only the direct Coombs test will be positive. A positive direct Coombs test alone will not interfere with typing or

cross matching. If the indirect Coombs test is also positive, problems may arise in the major cross match and the assistance of a hematologist or transfusion expert will be needed.

Fever has occurred within first 3 weeks of therapy, sometimes with eosinophilia or abnormalities in liver function tests, such as serum alkaline phosphatase, serum transaminases (SGOT, SGPT), bilirubin, cephalin cholesterol flocculation, prothrombin time, and bromsulphalein retention. Jaundice, with or without fever, may occur, with onset usually in the first 2 to 3 months of therapy. In some patients the findings are consistent with those of cholestasis. Rarely fatal hepatic necrosis has been reported. These hepatic changes may represent hypersensitivity reactions; periodic determination of hepatic function should be done particularly during the first 6 to 12 weeks of therapy or whenever an unexplained fever occurs. If fever and abnormalities in liver function tests or jaundice appear, stop therapy with methyldopa. If caused by methyldopa, the temperature and abnormalities in liver function characteristically have reverted to normal when the drug was discontinued. Methyldopa should not be reinstituted in such patients.

Rarely, a reversible reduction of the white blood cell count with primary effect on granulocytes has been seen. Reversible thrombocytopenia has occurred rarely. When used with other antihypertensive drugs, potentiation of antihypertensive effect may occur. Patients should be followed carefully to detect side reactions or unusual manifestations of drug idiosyncrasy.

Use in Pregnancy: Use of any drug in women who are or may become pregnant requires that anticipated benefits be weighed against possible risks; possibility of fetal injury can not be excluded.

Precautions: Should be used with caution in patients with history of previous liver disease or dysfunction (see Warnings). May interfere with measurement of: uric acid by the phosphotungstate method, creatinine by the alkaline picrate method, and SGOT by colorimetric methods. Since methyldopa causes fluorescence in urine samples at the same wavelengths as catecholamines, falsely high levels of urinary catecholamines may be reported. This will interfere with the diagnosis of pheochromocytoma. It is important to recognize this phenomenon before a patient with a possible pheochromocytoma is subjected to surgery. Methyldopa is not recommended for patients with pheochromocytoma. Urine exposed to air after voiding may darken because of breakdown of methyldopa or its metabolites.

Stop drug if involuntary choreoathetotic movements occur in patients with severe bilateral cerebrovascular disease. Patients may require reduced doses of anesthetics; hypotension occurring during anesthesia usually can be controlled with vasopressors. Hypertension has recurred after dialysis in patients on methyldopa because the drug is removed by this procedure.

Adverse Reactions: *Central nervous system:* Sedation, headache, asthenia or weakness, usually early and transient; dizziness, lightheadedness, symptoms of cerebrovascular insufficiency, paresthesias, parkinsonism, Bell's palsy, decreased mental acuity, involuntary choreoathetotic movements; psychic disturbances, including nightmares and reversible mild psychoses or depression.

Cardiovascular: Bradycardia, aggravation of angina pectoris. Orthostatic hypotension (decrease daily dosage). Edema (and weight gain) usually relieved by use of a diuretic. (Discontinue methyldopa if edema progresses or signs of heart failure appear.)

Gastrointestinal: Nausea, vomiting, distention, constipation, flatulence, diarrhea, mild dryness of mouth, sore or "black" tongue, pancreatitis, sialadenitis.

Hepatic: Abnormal liver function tests, jaundice, liver disorders.

Hematologic: Positive Coombs test, hemolytic anemia. Leukopenia, granulocytopenia, thrombocytopenia.

Allergic: Drug-related fever, myocarditis.

Other: Nasal stuffiness, rise in BUN, breast enlargement, gynecomastia, lactation, impotence, decreased libido, dermatologic reactions including eczema and lichenoid eruptions, mild arthralgia, myalgia.

Note: Initial adult dosage should be limited to 500 mg daily when given with antihypertensives other than thiazides. Tolerance may occur, usually between second and third month of therapy; increased dosage or adding a thiazide frequently restores effective control. Patients with impaired renal function may respond to smaller doses. Syncope in older patients may be related to increased sensitivity and advanced arteriosclerotic vascular disease; this may be avoided by lower doses.

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ORIGINAL ARTICLES

The therapy of refractory migrainous patients can be a perplexing problem. Recently, advances have been made in both prophylactic therapy and in migraine status. The introduction of steroids for status migrainous and propranolol, clonidine and pizotifen for interval treatment has provided added ammunition for practitioners in relieving the suffering of migraine patients.

Newer Concepts in Management of Migraine Headaches

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Headache is a common and vexing affliction with which an estimated 60 to 70 percent of the population suffers. Approximately 90 percent are classified as either muscle contraction headaches or vascular headaches of the migraine type. Fortunately, the majority of individuals are able to obtain relief with self-medication using simple analgesics; they rarely seek medical advice. However, a significant number have chronic refractory headaches requiring frequent medical attention. The purpose of this paper is to review the newer concepts in the management of migraine with special emphasis on prophylactic therapy.

Migraine — Definitions

The word hemicrania, introduced by Galen, was modified through the centuries to hemigranea, to emigranea, to migranea, and then to migraine. The term probably was defined best by Gowers in 1893: "Migraine is an affliction characterized by paroxysmal nervous disturbance of which headache is the most constant element. The pain is seldom absent and may exist alone, but is commonly accompanied by nausea and vomiting, and is often preceded by some sensory disturbance especially by some disorder of the sense of sight. The symptoms are frequently one sided and from this character of the headache the name is derived."

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Classification and Clinical Features

The incidence is between five and ten percent of the population.² A positive family history is found in 60 to 70 percent of the cases. More common in females, migraine usually begins in late adolescence or early adulthood, though at times it may begin in childhood. Attacks occur with varying frequency and are usually aggravated by emotional stress. The prodrome of "classic migraine" consists of scintillating scotomata, weakness, numbness, or dysphasia, but "common migraine" is preceded by feelings of euphoria, depression, irritability, and hunger, or by yawning, edema, and so on. The headache varies, but it is usually unilateral, throbbing in character and often accompanied by nausea and vomiting. Eighty percent of migraine is "common migraine" while only ten percent is "classic migraine."

"Cluster headache," which occurs in a series of closely spaced attacks is a variant found mainly in males with no aura or family history of migraine. Additional varieties of migraine include "basilar artery migraine" (where the symptoms arise from disturbances in the posterior circulation),¹ "hemiplegic migraine," "ophthalmoplegic migraine" and "lower-half headaches" (where pain may be centered around the lower half of the face).³

The aura of a migraine attack results from vasoconstriction of the vessels supplying the brain and retina. This is followed by dilatation of the extracranial vessels which produces the throbbing headache. Edema of the vessel walls

and aseptic inflammation of the scalp follow and result in a dull ache.²

Pathophysiology and Biochemistry

A number of humoral factors have been implicated in the production of the migraine attack — viz, plasmakinin, histamine, and serotonin. According to a hypothesis by Franchamps,⁴ the attack is initiated by the release of serotonin from blood platelets and the release of histamine and proteolytic enzymes from mast cells. Capillary permeability is increased by serotonin and histamine with the resultant transudation of plasmakinin into the vessel walls and the perivascular tissue. The pain threshold is thereby reduced by the action of plasmakinin and serotonin on pain receptors in the vessel walls. Released serotonin is excreted by the kidneys as 5 hydroxyindolacetic acid resulting in a relative fall in the plasma serotonin level. This fall causes a decrease in the tone of the extracranial vessels and constriction of the capillaries giving rise to further distension of these arteries and pain.

Treatment

Acute Attack — Many patients with migraine are able to obtain relief with simple analgesics, such as aspirin, propoxyphene, or acetaminophen. Their addiction potential makes use of narcotics hazardous. In instances in which simple measures do not suffice, one usually proceeds to the ergot preparations.

Ergotamine is a vasoconstrictor which acts as an adenosympatholytic and antiserotonin agent.⁵ Ergot therapy should be initiated at the first sign of an attack: A two mg tablet of ergotamine tartrate may be administered sublingually at half-hour intervals until relief is obtained, but the dose should not exceed six mg per day or ten mg per week. Oral ergot preparations may be ineffective if there is associated vomiting, so one may need to use other routes of administration such as rectal suppositories or intramuscular injection. The intramuscular dosage of ergotamine tartrate is 0.25 to 0.5 mg. Ergotamine preparations in aerosol form have been used, but the safety of the propellants in these aerosols has been questioned because of their possible cardiac toxicity.⁶ There is some evidence that caffeine in combination with ergotamine

may enhance the absorption of the ergotamine tartrate.⁷ Limiting side effects of ergotamine include nausea and vomiting. These preparations may be combined with antiemetics to reduce the nausea and vomiting which can be as incapacitating as the headache itself. Ergot is contraindicated in patients with coronary artery disease or peripheral vascular disease, and in pregnancy. It is also contraindicated in hemiplegic migraine. Prolonged administration and excessive dosage of ergot can lead to ergotism or gangrene.

Interval Treatment

When attacks of migraine occur frequently, weekly or more frequently, treatment is aimed at prophylaxis or interval therapy. There has been a recent upsurge in the variety of drugs used and the most common are the slow-release ergot preparations, methysergide and propranolol. Pizotifen and clonidine are used sparingly at present but may be promising in the future. Other drugs employed are cyproheptidine, levodopa, phenytoin (formerly diphenylhydantoin), and MAO inhibitors.

Ergot: In patients who are frequently awakened from sleep with headaches, a simple preventive measure is to administer an ergot preparation at bed time. Slow-release ergot preparations used for interval therapy cannot be taken for prolonged periods of time because of their toxic effects.

Methysergide: Methysergide maleate (Sansert)[®], chemically similar to ergotamine tartrate, differs in its pharmacological activity in that it is a potent serotonin antagonist with weak vasoconstrictor activity. This drug can be used daily for many months to lessen the frequency and severity of migraine attacks. The usual dose of the 2 mg tablets is 2 to 4 daily with meals. The drug should not be taken for more than six months at a time and should be withdrawn for about six weeks before reinstituting therapy. Longer use may lead to retroperitoneal fibrosis. Sansert[®] is an effective drug for cluster headache since the clusters are usually of short duration. Side effects may include gastric distress, nausea, vomiting, insomnia, and psychic disturbances (due to its chemical relationship to LSD).⁸

Propranolol: Inderal[®], a relatively new compound used primarily in the treatment of angina pectoris and cardiac arrhythmias, has been found to be effective prophylactically in 70 to 80 percent of cases of refractory migraine.⁹⁻¹⁰ The mechanism of action of propranolol in migraine appears to be blockade of beta adrenergic receptors in the smooth muscle of vessel walls. This conceivably would enhance vasoconstriction and prevent the reactive vasodilatation.⁹ The usual oral dosage is 20 mg four times a day. Side effects are variable and consist of nausea, diarrhea, and lightheadedness which usually disappear on continued therapy. Propranolol should be used with caution in patients with inadequate myocardial function and should not be used in patients with a history of asthma or severe allergy.⁸

Clonidine: Clonidine hydrochloride (Catapres[®]), an imidazoline derivative used for the treatment of hypertension, has also been found to be effective in the prophylactic treatment of refractory migraine.¹¹⁻¹² Chronic administration of clonidine which is believed to result in a decreased responsiveness of peripheral vessels to both dilator and constrictor stimuli is effective in 60 to 70 percent of cases.¹¹ The dosage is 0.05 to 0.15 mg per day orally. The main side effects are sedation and dryness of the mouth.

Pizotifen: Sandomigran[®] is a benzocycloheptathiophene derivative similar to cyproheptidine. This recently synthesized drug, a powerful serotonin and histamine antagonist, is an effective prophylactic agent in 70 percent of the cases tested with a dosage of 1.5 to 3.0 mg three times daily.¹³ This drug is relatively free of side effects except for mild sedation and vomiting in a few cases, but it is not yet available for use in the United States.

Cyproheptidine: Periactin[®] is structurally related to the phenothiazine antihistamine drugs and is commonly used in the treatment of allergies. As a potent antagonist of both histamine and serotonin it has been found to be effective in 50 percent of patients with migraine.¹⁴

Levodopa: Used predominantly for the treatment of Parkinson's disease, Levodopa recently

has been reported to have caused remission of headache when given to patients with Parkinson's disease who incidentally had migraine.¹² When levodopa was replaced by placebo the migraine attacks returned. Further investigation of this drug in the prophylaxis of migraine is warranted.

Corticosteroids: The anti-inflammatory effect of corticosteroids has been useful in the treatment of refractory cases of cluster headaches, both in a single dose form (e.g. 30 mg of prednisone at the start of the attack) or with continuous alternate day therapy (e.g. 20 mg of prednisone every 48 hrs). Because of the complications of prolonged maintenance therapy a single dose of steroid when headache begins may be less hazardous.¹⁵

Monoamine oxidase inhibitors: MAO inhibitors such as phenelzine sulfate or isocarboxazide decrease the frequency and severity of refractory migrainous headaches in most cases. However, these drugs seldom have been used in recent years because of their potentially serious side effects and the variability of response.^{12,16}

Phenytoin: Migraine patients with abnormal electroencephalograms may respond to phenytoin (Dilantin[®]) and other antiepileptic agents used prophylactically. However, there are no control studies to substantiate this claim.¹²

Supportive Therapy

Removal or reduction of precipitating factors is vital in the treatment of migraine. This means avoidance of sensitizing factors including birth control pills, sleep deprivation, alcohol abuse, and foods containing tyramine (such as cheeses, chocolate, and citrus fruits), exposure to glare, flickering lights, fatigue, fasting, or excessive emotional or physical stress.¹⁷ Some patients with migraine require treatment of underlying psychiatric disorders such as anxiety or depression which may perpetuate the attacks.¹⁶

Cryosurgery of external carotid artery branches to the scalp for treatment of refractory migraine has been ineffective and should be discouraged.¹⁷

Migraine Status

The occurrence of confluent attacks of headaches for several days without remission may result in severe dehydration from incessant vomiting. This form of migraine is uncommon and requires prompt treatment with hospitalization and treatment with antiemetics, sedatives, fluids, and analgesics. Ergot preparations may aggravate this situation and should be avoided. Cortisone injections (equal to 40 to 60 mg of prednisone) daily for one to two days, the treatment of choice, may be the only form of therapy to bring about a remission.^{19,20}

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A study was performed to evaluate our experience and to determine the safety and efficacy of cesarean hysterectomy as a method of sterilization. A total of 150 patients were treated by cesarean hysterectomy at the New Jersey Medical School from January 1968 through December 1972. Of the total, 12 were considered to be life-saving procedures. The remainder were performed as a sterilization procedure. The overall incidence of complications in the "sterilization group" was 48.6 percent. The need for blood transfusions in 51.4 percent of the patients was the major problem encountered which makes us hesitant to give unqualified approval to elective employment of this useful operation.

Cesarean Hysterectomy for Sterilization: Is It Worthwhile?

**Marco Antonio Pelosi, M.D.,
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One of the trends in modern obstetric practice is the more liberal use of cesarean hysterectomy as an elective procedure for sterilization and for the prevention of future gynecological disease. Its elective use, however, is always a controversial issue. The present study was performed in order to evaluate our experience and to determine the safety and efficacy of this procedure as a method of sterilization.

In an excellent review of cesarean hysterectomy, Reis⁹ traced the history of the use of cesarean hysterectomy from the first report by Bixby in 1869, through the first successful cesarean hysterectomy by Porro in 1876, to the modern concepts. In 1951, Davis³ proposed that cesarean hysterectomy was a valid method of sterilization in certain patients ranging from those who required removal of the uterus to those who requested elective sterilization. Since then, several published reviews of the procedure contained data for and against the operation. In 1963, Pletsh and Sandberg⁸ reviewed the American literature since 1950, and found reports of 1,819 cesarean hysterectomies. They classified the procedure as either "indicated" or "elective," the former referring to those cases in which the patient needed the procedure to preserve her life and the latter including all other cases. They concluded that, considering the long-term objectives of permanent sterilization and prevention of subsequent disease which might require surgical intervention, hysterectomy was the

procedure of choice for sterilization at the time of the obstetrically indicated cesarean section. Others in agreement felt that the operation was not unduly hazardous, and that it was useful because of virtual absence of future undesirable sequelae.^{1,10,12} Others opposed hysterectomy on the basis of associated higher morbidity, and major complications, and increased use of blood transfusions.^{2,6}

Material and Methods

During the five-year interval from January 1, 1968 through December 31, 1972, a total of 150 patients were treated by cesarean hysterectomy at the Martland Hospital Unit of New Jersey Medical School. Almost all patients treated at this hospital are members of socio-economically deprived groups and many receive no prenatal care whatsoever. Hospital care is provided primarily by house staff under the supervision of attending physicians. Of the cesarean hysterectomies, 12 were considered to be life-saving procedures because of bleeding (Table I). The remainder of the patients were given a choice of method of sterilization. During the first year, seven patients were delivered by cesarean section solely for the purpose of achieving sterilization, an indication previously reported by others.^{10,11} Since 1969, this was no longer considered a valid indication for cesarean section and all abdominal deliveries were obstetrically indicated. In the majority of those treated by hysterectomy, 108 out of the 138 total, the decision for

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Table I
Indications for Cesarean Hysterectomy

Elective Group: 138 patients	
Previous cesarean section	77
Malpresentation	20
Failure of induction of labor	16
Carcinoma <i>in situ</i> of cervix	9
Multiparity	7
Fetopelvic disproportion	2
Fetal distress	2
Placenta previa	2
Rh incompatibility	1
Prolapse of umbilical cord	1
Recent conization of the cervix	1
Emergency Group: 12 patients	
Abruptio of placenta with uterine atony	3
Uterine rupture	3
Placenta previa with persisting bleeding	2
Placenta accreta	2
Leiomyomata with bleeding	2

the procedure was made prior to the onset of labor. In the remainder, cesarean section was determined by an incident occurring during labor. If her medical condition did not contraindicate elective hysterectomy, the patient requesting sterilization was offered a choice of cesarean hysterectomy or cesarean section plus tubal ligation regardless of her age or parity. Anemia, active profuse hemorrhage not yet reflected in the blood count, overt diabetes mellitus, cardiac disease, and lack of knowledge of a negative cervical cytology were considered contraindications to elective hysterectomy. All the cesarean hysterectomies were performed by chief resident surgeons in obstetrics and gynecology with direct staff supervision. The attending obstetrician usually scrubbed and assisted with the procedure.

Results

The mean age was 32 years and the mean parity was 6.2 for the "elective group;" in the

"emergency-hysterectomy group," the respective means were 30.8 years old and 5.8. The incidence of cesarean hysterectomy as compared with total deliveries, cesarean section, and cesarean section plus tubal ligation are displayed in Table II. The greater frequency of cesarean hysterectomy as compared to tubal ligation in each year reflects staff bias. Spinal anesthesia was used in 52.9 percent, while the remainder were operated under general anesthesia. A transverse abdominal incision (Pfannenstiel) was used in the majority of the patients, although 11 of the 12 having an emergency cesarean hysterectomy received a vertical midline incision. The average cesarean hysterectomy, including those done by resident physicians, took somewhat less than two hours. The mean times were 118 minutes in the "elective group" and 102 minutes in the emergency group. The length of postoperative stay was 7.4 days for the "elective group" and 8.7 days for the "emergency patients."

A number of patients had additional surgical procedures performed (Table III). Prophylactic ligation of the internal iliac arteries (hypogastric arteries) was done as an elective procedure in an attempt to reduce the amount of operative bleeding and for resident training. We now believe that prophylactic ligation of the internal iliac arteries is of questionable value in reducing operative blood loss, which can be controlled by more conventional means.⁷

Hemorrhage was not measured directly, but requirements for blood transfusions were felt to be a valid reflection of blood loss resulting from the surgery. The need for blood transfusions in the "elective group" was rather striking and is seen as one of the major deterrents to cesarean hysterectomy (Table IV). Complications are

Table II
Incidence

Year	Total Deliveries	Cesarean Sections		Cesarean Section and Tubal Ligation		Cesarean Hysterectomy	
		Number	%	Number	%	Number	%
1968	4120	178	4.3	6	0.1	40	0.9
1969	3961	168	4.2	6	0.1	36	0.9
1970	3410	168	4.9	8	0.2	30	0.8
1971	2824	130	4.6	13	0.4	26	0.8
1972	2720	138	5.0	15	0.5	18	0.6

Table III
Additional Surgical Procedures

Procedures	Elective Hysterectomy	Emergency Hysterectomy
Hypogastric artery ligation	62	4
Appendectomy	12	
Unilateral salpingo- oophorectomy	10	
Bilateral salpingo- oophorectomy		1
Lysis of adhesions	8	
Repair of umbilical hernia	6	
Bladder repair	3	
Repair of incisional hernia	2	
Bowel repair	1	
Breast biopsy	1	

Table IV
Use of Blood Transfusions

	Elective Hysterectomy	Emergency Hysterectomy
Mean pre-operative hemoglobin	12.1	9.2
Number of patients transfused	71(51.4%)	12(100%)
Mean units per patient transfused	1.5	3.7

listed in (Table V). In the "elective group," attempts at total hysterectomy were twice abandoned during the procedure because of bleeding and in two additional patients, the cervix was unintentionally left.

Table VI which indicates the pathologic diagnoses, shows that 48 patients in the "elective group" had co-existing uterine pathology. Some pathology, such as cervical carcinoma *in situ*, was a valid indication for hysterectomy at the time of surgery, although not life-saving. Other conditions such as leiomyomata, while not necessarily requiring current hysterectomy, could result in significant gynecologic symptomatology in the future. Only 102 patients had completely normal uteri. There were no fatalities in this series of patients.

Discussion

The debate regarding the use of hysterectomy or tubal ligation as the method of sterilization at the time of cesarean section has found many taking sides on the basis of their own experience or prejudice. Tubal ligation does not obviate risk of

Table V
Complications

	Elective Hysterectomy		Emergency Hysterectomy	
Complications	Number	%	Number	%
None	71	51.4	5	41.6
Infections				
Urinary tract	29	21.0	2	16.6
Wound	11	7.7	1	8.3
Unexplained	9	6.3		
Vaginal cuff	6	4.2		
Pulmonary	5	3.6		
Peritonitis	1	0.7		
Pelvic thrombophlebitis	1	0.7		
Septicemia (bacteroids)	1	0.7		
Serum hepatitis	1	0.7		
Endometritis	1	0.7		
Bleeding				
Operative (Requiring salpingo-oophorectomy)	2	1.4		
Vaginal cuff	2	1.4		
Pelvic hematoma	1	0.7		
Wound hematoma	1	0.7		
Anemia requiring readmission	1	0.7		
Other				
Bladder injury	3	2.1		
Intentional subtotal hysterectomy	2	1.4	3	25.0
Unintentional subtotal hysterectomy	2	1.4		
Small bowel injury	1	0.7		
Evisceration			1	8.3
Endometriosis of surgical scar	1	0.7		
Ileus	1	0.7		

Table VI
Pathologic Diagnoses

Diagnoses	Elective Hysterectomy	Emergency Hysterectomy
Normal post gravid uterus	102	5
Couvalier uterus	—	3
Chorioamnionitis with endometritis	5	—
Leiomyomata uteri	23	2
Adenomyosis	8	—
Placenta accreta	—	2
Chronic cervicitis	68	—
Cervical dysplasia	11	—
Carcinoma <i>in situ</i> of cervix	6	—
Normal fallopian tube	4	—
Normal ovary (hematoma)	1	—
Acute salpingitis	1	—
Chronic salpingitis	5	2
Follicular cyst	3	—
Serous cyst	1	—
Germinal inclusion cyst	1	—
Dermoid tumor	1	—
Corpus luteum	3	—
Normal appendix	12	—

subsequent uterine disease, as shown by reports of major gynecologic surgery in 25 percent of cases following tubal ligation,⁵ but it is a much simpler procedure than cesarean hysterectomy. In our experience⁴ and that of most other authors, the requirements for blood transfusion are significantly higher in patients treated by hysterectomy. This would seem to be *the* major drawback to the elective use of hysterectomy. There is an essential failure rate associated with tubal ligation, not found with hysterectomy, which offers the benefits of a permanent, completely effective procedure and the elimination of a source of future pelvic symptomatology or pathology, including cancer.

Our series contained isolated patients who were treated by cesarean hysterectomy and had potentially lethal complications. Surgical injuries, particularly to the urinary tract, are likely to occur in patients treated by cesarean hysterectomy, but our major complication was the increased need for blood transfusion. While none of our serious complications of cesarean hysterectomy ended fatally, we realize the potential for such. Breaks in the principles of good surgical techniques and close post-operative observation could easily result in catastrophic complications.

There is no argument about the use of cesarean hysterectomy in those patients in whom it is a life-saving procedure. In addition, we feel that the presence of other pathology which makes ultimate hysterectomy likely, makes cesarean hysterectomy the procedure of choice. The immediate increased risk then avoids completely the risk of a second procedure, as well as the cost and inconvenience of a second hospitalization. The management of patients in whom elective sterilization is to be done must be individualized. If the patient is apprised of the increased risk of

cesarean hysterectomy and desires this more definitive procedure on the basis of informed consent, the danger of complications is not prohibitive and should not deter the well-trained operator. The risks should mandate use of all available skills, intensive evaluation of the patient, and concerned recognition of the potential adverse consequences of inadequate attention to details.

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PATRONIZE OUR ADVERTISERS

In this less than perfect world, occupational hearing losses will continue and will need to be evaluated and compensated for in a fair and equitable manner. The physician must recognize the noise-induced hearing loss problem and participate in its prevention and evaluation. The employer must fulfill his responsibility to protect his employee, who in turn, must be aware of his own responsibility to protect himself. New Jersey needs to pass legislation for occupational hearing loss which will have advantages both to employee and employer.

Occupational Hearing Loss

Walter A. Petryshyn, M.D.
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An undesirable by-product of many industries is noise, whose harmful effect upon individuals and communities has become better understood in the past decade. Since the federal government has attempted to prevent occupational deafness by passing rules and regulations and New Jersey is the home of numerous small and large industries, an understanding of the noise problem and its management is necessary.

Noise and Its Effects

Noise is unwanted sound which may have general effects, varying from physiological to psychological changes, or very specific results, including physical damage to the auditory mechanism.¹⁻³ Industrial noise may be impulsive (drop hammer), intermittent (air jack hammer) or steady (lathes).⁴ The damage which is produced in the ear is called noise-induced hearing loss (N.I.H.L.) Although individual susceptibility varies, prolonged exposure will inevitably cause damage to everyone.

The amount of physical damage which occurs depends on four factors:

1. The sound pressure level measured in decibels, i.e. the intensity or loudness of the sound.
2. The duration and distribution of the noise exposure during the day.
3. The sound spectrum distribution, i.e. the frequencies, cycles per second or hertz (Hz.) of the sound waves in the noise.

4. Cumulative noise exposure in days, weeks, and years.

The specific damage occurs in the hair cells of the organ of Corti in the inner ear. The hair cells, which are associated with the perception of frequencies greater than 2000 Hz. and less than 8000 Hz., are affected initially. This does not interfere with the reception of speech, but as exposure continues, the lower frequencies are injured and speech reception is decreased. Noise-induced hearing loss, caused by the destruction of the inner ear, is permanent. Since it cannot be repaired, the solution is to reduce or prevent harmful noise exposure through a joint effort of the physician, the employee, and the employer.

Physician's Responsibility

The family physician or internist must include questions relative to harmful noise exposure in his medical history. These might include the following:

Are you troubled with head noises or ringing in your ears after working for several hours?

Do you find that speech and other sounds are muffled for several hours after your working day? Positive answers to these questions indicate a potential hearing loss. The ordinary whispered and spoken voice and tuning fork tests are of limited value in diagnosing an early noise-induced hearing loss, therefore the patient deserves a complete otologic and hearing evaluation.

The otologist's history must go beyond the routine questions concerning symptoms, past medical diseases and injuries, and must include

details about previous employment, hearing measurements, military service, hunting and target shooting, hobbies requiring noisy equipment (such as power saws, motorcycles and snowmobiles), previous ear surgery and hearing loss in other family members. The audiological evaluation should include pure tone air and bone conduction levels, speech reception thresholds, speech discrimination percentages, tone decay and recruitment tests. The Stenger test is valuable in diagnosing the non-organic hearing loss. Tympanometry provides supplementary information about the status of the middle ear. Impedance audiometry helps to confirm cochlear or auditory nerve pathology with the acoustic reflex and tone decay tests. Polytome x-rays of the middle and inner ear and of the internal auditory meati may reveal pathology. Vertigo associated with hearing loss, can be evaluated with electronystagmography, using gaze, postural and positional testing and, when indicated, caloric testing.

The *industrial physician*, who is directly involved and concerned with the noise problem, is essential to the hearing conservation program. He must undertake pre-employment and pre-placement hearing tests since they provide a record of the initial status of each new employee's hearing and make it possible to follow any subsequent changes in hearing ability. These initial tests must be followed by routine, periodic follow-up tests to identify employees who are susceptible to noise-induced hearing loss and to monitor the success of any hearing conservation program undertaken.⁴

Hearing Conservation Program

A successful hearing conservation program depends on the cooperation of employer and employee. An advisory approach only leads to future problems for both. The employer must assess the noise exposure and if the environment does not comply with current safety standards, must reduce the noise by appropriate controls. If this is not possible, an effective personal ear protection program is necessary. The employee must be made aware of his personal benefits from hearing conservation and should willingly participate in the essential protection program.

In April 1971, the Occupational Safety and Health Act (OSHA) provided noise regulations for most employers except those already covered by the Walsh-Healey noise regulations.⁶ These Labor Department Occupational Noise Standards stipulate that 90 dBA is the limit for eight hours a day habitual noise exposure and a permissible increase of a 5 dB in intensity for each halving of exposure time up to a maximum of 115 dBA. Currently the Environmental Protection Agency is pressing for a lowering of the noise level to 85 dBA for an eight hour day as a safer standard. The final decision will be up to the Secretary of Labor. National estimates indicate that it would cost \$18 billion to achieve a 90 dBA environmental level and \$30 billion for the 85 dBA limit.⁵ Impact noise, which must be measured by special equipment and technique, cannot exceed 140 dB peak sound pressure level by OSHA standards.

The following chart illustrates sound pressure levels of familiar environmental sounds.

Decibels

- 30—Faint whisper
- 50—Average office
- 60—Normal speaking level
- 70—Noisy restaurant
- 90—Shouted speech (Speech interference level)
- 95—Jack hammer, electric blender
- 100—New York subway, motorcycle
- 105—Power lawn mower
- 115—Discotheque
- 120—Thunder clap
- 130—Riveting gun
- 140—Jet engine (100 feet) (Pain threshold)

Percentage Impairment of Hearing

The "percentage impairment of hearing" designates the degree of handicap that is associated with hearing loss. It is a medical evaluation which is used by the courts to calculate compensation for occupational hearing loss. Since the hearing of speech is socially important, Workmen's Compensation laws generally permit payment only for hearing loss in the speech frequencies. (500, 1000 and 2000 Hz.)⁷

Three formulas currently are used to calculate the percentage of hearing impairment. The one accepted in most states is the formula of the American Medical Association (AMA) and the American Academy of Ophthalmology and Otolaryngology (AAOO) as modified in 1971.⁴ This formula uses the average of the pure tone thresholds for the three speech frequencies of 500, 1000 and 2000 Hz for each ear. When the audiometer used for these pure tone measurements has been calibrated to the International Standard Organization (ISO) 1964, then 1.5 percent impairment is allowed for every decibel over twenty-five decibels up to a maximum of 100% at 92 dB.⁴ If the audiometer is calibrated to the old American Standards Association (ASA) 1951, fifteen decibels are used rather than twenty-five, up to a maximum of 82dB.⁴ This formula was developed because of the importance of the speech frequencies of 500, 1000 and 2000 Hz. and does not add the hearing loss at 4000 Hz. which occurs early in noise-induced hearing loss.

A modification of this formula, which was developed by the Committee on Hearing, Bioacoustics and Biomechanics of the National Academy of Sciences—National Research Council (CHABA), is used by the United States Armed Forces and other agencies of the Federal Government.⁷ The CHABA formula uses the pure tone threshold average for 1000, 2000 and 3000 Hz. and for each decibel of hearing loss over 35 dB, 1.75 percent hearing impairment is allowed.

In each case, binaural impairment is determined with the following formula:

$$\text{Binaural impairment} = \frac{\% \text{ loss in worse ear} + 5 (\% \text{ loss in better ear})}{6}$$

The percent of binaural hearing impairment can be related to whole man impairment. (Table I)

In New Jersey there are no state statutes relating to compensation for occupational deafness, therefore awards are based on judicial opinion. The major compensation law firms and compensation companies utilize the formula of the AMA-1947 which is based on the weighted percentages for the four frequencies of 500, 1000,

Table I
Percent of Binaural Hearing Impairment as Related to Whole Man Impairment

Impairment of		Impairment of	
Binaural Hearing, %	Whole Man, %	Binaural Hearing, %	Whole Man, %
0 — 1.7	0	50.0— 53.1	18
1.8— 4.2	1	53.2— 55.7	19
4.3— 7.4	2	55.8— 58.8	20
7.5— 9.9	3	59.9— 61.4	21
10.0—13.1	4	61.5— 64.5	22
13.2—15.9	5	64.6— 67.1	23
16.0—18.8	6	67.2— 70.0	24
18.9—21.4	7	70.1— 72.8	25
21.5—24.5	8	72.9— 75.9	26
24.6—27.1	9	76.0— 78.5	27
27.2—30.0	10	78.6— 81.7	28
30.1—32.8	11	81.8— 84.2	29
32.9—35.9	12	84.3— 87.4	30
36.0—38.5	13	87.5— 89.9	31
38.6—41.7	14	90.0— 93.1	32
41.8—44.2	15	93.2— 95.7	33
44.3—47.4	16	95.8— 98.8	34
47.5—49.9	17	98.9—100.0	35

Note: Impairment of whole man contributed by binaural hearing impairment may be rounded to the nearest 5% *only* when it is the sole impairment involved.

(Pullen, McCurdy & Cabeza—Miami Hearing and Speech Center)

2000 and 4000 Hz. (Table II) This formula includes the three frequencies of 500, 1000 and 2000 Hz., similar to the AMA-AAOO 1971 and also adds 4000 Hz. The AMA-1947 formula uses the audiometer standards of ASA-1951. When audiometric measurements are based on the current ISO-1964 scale, a conversion to ASA-1951 is necessary before the AMA-1947 formula can be applied. For clinical purposes, numbers rounded off to the nearest 5 dB are subtracted from the ISO-1964 measurements as follows:

Hz.	Decibels Subtracted
125	10
250	15
500	15
1000	10
2000	10
3000	10
4000	5
6000	10
8000	10

At this time, New Jersey is the only state which uses this AMA-1947 formula.⁹ The added hearing loss at 4000 Hz. adds to the overall

Table II
Weighted Percentages by Frequency

Loss in Decibels	Percentage Losses			
	500 cps	1000 cps	2000 cps	4000 cps
0				
5				
10	0.2	0.3	0.4	0.1
15	0.5	0.9	1.3	0.3
20	1.1	2.1	2.9	0.9
25	1.8	3.6	4.9	1.7
30	2.6	5.4	7.3	2.7
35	3.7	7.7	9.8	3.8
40	4.9	10.2	12.9	5.0
45	6.3	13.0	17.3	6.4
50	7.9	15.7	22.4	8.0
55	9.6	19.0	25.7	9.7
60	11.3	21.5	28.0	11.2
65	12.8	23.5	30.2	12.5
70	13.8	25.5	32.2	13.5
75	14.6	27.2	34.0	14.2
80	14.8	28.8	35.8	14.6
85	14.9	29.8	37.5	14.8
90	15.0	29.9	39.2	14.9
95		30.0	40.0	15.0
100				

Explanation

1. *Unilateral (one ear) hearing loss determination:* For each of the four frequencies included, determine from the table above the percentage loss corresponding to the loss in decibels shown in the column at the left.

2. Add the percentage losses as indicated above to determine the total percentage loss for the ear.

3. *Binaural (both ears) hearing loss determination:* Multiply the total percentage loss in the better ear (with the least loss) by 7, add the total percentage in loss in the worse ear, and divide by 8. The result is the binaural percentage loss. This is shown below as a formula.

$$\frac{(\text{Total \% Hearing Loss}) + (\text{Total \% Hearing Loss})}{(\text{Better Ear} \times 7) + (\text{Worse Ear} \times 1)} =$$

Combined or Binaural Hearing Loss

(Based Upon Information (Fowler & Sabine)
In: JAMA 133:397, Feb. 8, 1947

(Background for Loss of Hearing Claims, American Mutual Insurance Alliance, 1964)

percentage of hearing impairment in Workmen's Compensation awards which leads industry to feel that it is being treated inequitably by this formula. It would be unfortunate if any more employers move out of New Jersey in this period of high unemployment. The solution

is the passage of specific legislation for compensating occupational hearing loss which will have advantages to both employer and employee. In developing adequate legislation, additional factors, such as tinnitus associated with hearing loss, allowances for presbycusis, compensation for non-organic hearing loss, provision for a hearing aid and credit given for improvement with a hearing aid, need to be considered.

In 1971, the General Assembly of North Carolina passed advanced legislation which defined harmful noise, occupational hearing loss, the specific formula for the calculation of percentage of hearing impairment, and the number of weeks of compensation payable for total or partial hearing loss. The North Carolina law could serve as a "model law" for New Jersey.⁸

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Moderate doses of commercially available vitamin D (ergosterol) preparations altered the serum calcium and alkaline phosphatase levels in ambulatory adult patients who were under long-term treatment with diphenylhydantoin sodium. Prophylaxis with vitamin D against anticonvulsant osteomalacia appears safe and effective in returning the serum calcium and alkaline phosphatase toward normal levels.

Anticonvulsant Osteomalacia: Prophylaxis with Vitamin D in Institutionalized Adult Patients*

Henry H. Sherk, M.D., Camden
William T. Snape, M.D., Haddonfield

The effect of anticonvulsant medication on vitamin D metabolism has been well documented since first recognized by Schmid in 1967.⁷ Several studies have suggested that anticonvulsant drugs, notably meprobamate, primidone, diphenylhydantoin, and phenobarbital, induce the formation of hepatic ribosomal enzymes which block the hydroxylation of cholecalciferol in the liver, and cause the formation of metabolically inactive polar end products of vitamin D.^{1-3,9} This disruption of the biotransformation of vitamin D secondarily prevents the dual hydroxylation of adequate amounts of 1,25 dihydroxycholecalciferol in the kidney and prevents the formation of the calcium-binding protein in the gut. Without the absorption of sufficient calcium from the lumen of the bowel, the skeleton is gradually demineralized, producing clinical osteomalacia in adults and rickets in children. Skeletal changes related to the administration of anticonvulsant medication have been most marked in institutionalized patients and severe deformities, multiple fractures and non-unions have been described, particularly in those who are crib-bound and non-ambulatory. Pediatric patients also develop the chemical and radiographic changes of rickets in both institutionalized and non-residential settings; much of the investigation of the effects of anticonvulsant drugs has been carried out on these patients.^{1,4} The risk of skeletal deformity and fracture probably diminishes in adult ambulatory patients, but these problems may result from disruption of vitamin D metabolism caused by administration of anticonvulsant medication to such individuals.⁶

Moderate doses of vitamin D appear to override the blocking action of the hepatic ribosomal enzymes induced by anticonvulsants and prevention of skeletal demineralization is possible through the administration of this agent.⁸ The dosage level of vitamin D for various categories of patients taking anticonvulsant drugs has not been established clearly. The purpose of this paper is to present our experience in the treatment of ambulatory adult institutionalized patients taking anticonvulsant drugs with prophylactic vitamin D.

Materials and Methods

Twenty-seven ambulatory adult patients at the Camden County Psychiatric Hospital at Lakeland, averaging sixty-two years of age had the diagnosis of psychosis associated with epilepsy. All patients had taken 300 mg. of diphenylhydantoin and 90 mg of phenobarbital daily for at least two years. On three consecutive days, serum calcium, phosphorous, and alkaline phosphatase determinations were made and averaged. Each patient then was given 50,000 units of vitamin D by mouth weekly in the form of commercially available ergocalciferol. At the end of eight months the studies were repeated and the results compared to those obtained previously.

During the study patients had no restriction on ambulation and exercise, and had regular diet without additional supplemental vitamins. Before and after the institution of vitamin D each patient had a complete blood count, SMA-12* analysis, chest and abdominal roentgenograms, and urinalysis.

*This study is from the Camden County Psychiatric Hospital at Lakeland.

Eighteen, healthy, age-matched controls, who had not taken anticonvulsant drugs, were selected. These patients had had serum calcium, phosphorous, and alkaline phosphatase determinations performed while the study on the seizure group was in progress. The chemistries were done by the same laboratory personnel using the same techniques throughout. We did not withhold vitamin D therapy from the seizure group to use patients in this population as controls. Since anticonvulsant osteomalacia has been widely recognized and thoroughly documented in a number of clinical and laboratory investigations, we felt that untreated seizure patients faced an unacceptably high risk of pathologic fracture due to demineralized bone.⁹ This would be especially true if the patient were known to have low serum calcium and high alkaline phosphatase levels suggesting the presence of anticonvulsant osteomalacia. The average levels of the serum calcium, phosphorous, and alkaline phosphatase in the controls are shown in Table III.

Table III
Controls

Subjects	Calcium mg/dl	Phosphorus mg/dl	Alkaline Phosphatase
9 Males	9.6	4.0	3.0
9 Females	9.9	3.7	3.4

Results

The averages of the results of the three calcium, three phosphorous, and three alkaline phosphatase determinations before and after the ad-

ministration of vitamin D, are shown in Table I for female patients and Table II for male patients. In both males and females the calcium level rose during the period of vitamin D administration but only in males was the difference statistically significant. In both males and females the alkaline phosphatase level fell to a statistically significant degree. (See Tables IV and V)

During the investigation, none of the patients developed a major illness or sustained a fracture. At the conclusion of the study none of the patients revealed changes in kidney function such as elevated blood urea nitrogen, proteinuria, or hematuria. X-rays of the chest and abdomen did not reveal ectopic calcification.

Five of the patients were mildly diabetic and controlled with diet only, while two more severe diabetics were controlled with oral hypoglycemic agents. One patient had a mild proteinuria both before and after the study. One patient had slightly impaired liver function before the study but no change was noted in the liver enzyme evaluation at the conclusion of the study. A comparison of the serum chemistries in the control group to those in the seizure population revealed that the controls had a higher average serum calcium level both before and after the seizure group had been treated with vitamin D. In addition, the average alkaline phosphatase level was lower in the control group than in the seizure group both before and after treatment.

Table I
Average Values in Adult Female Patients

Patient Age	Before treatment with vitamin D			After treatment with vitamin D		
	Calcium Mg/dl	Phosphorus Mg/dl	Alk. Phos. (Bodansky)	Calcium Mg/dl	Phosphorus Mg/dl	Alk. Phos. (Bodansky)
63	8.7	3.7	7.3	9.2	4.1	7.3
92	9.3	3.4	6.4	9.3	3.4	4.8
50	9.0	4.1	2.8	9.5	4.0	2.6
70	8.5	3.2	3.6	8.6	3.2	2.9
55	8.2	4.4	6.6	8.9	4.4	5.2
76	9.6	3.8	7.8	9.4	3.7	4.8
72	9.5	4.0	2.6	8.9	4.0	1.6
52	9.0	3.9	2.9	8.8	3.8	2.7
64	9.4	3.5	4.4	9.5	3.6	2.9
64	8.6	3.9	4.7	9.9	4.1	4.0
Mean 65.8	9.0	3.8	4.9	9.2	3.8	3.8

Table II

Average Values in Adult Male Patients

Patient Age	Before treatment with vitamin D			After treatment with vitamin D		
	Calcium Mg/dl	Phosphorus Mg/dl	Alk. Phos. (Bodansky)	Calcium Mg/dl	Phosphorus Mg/dl	Alk. Phos. (Bodansky)
76	8.8	3.0	4.0	8.9	3.5	4.1
63	9.1	3.0	10.2	9.2	3.4	6.1
55	8.3	3.8	4.3	8.8	3.3	2.8
60	8.4	3.9	3.8	8.7	3.4	3.5
73	9.3	3.1	2.8	8.7	2.5	3.5
58	9.6	3.3	5.5	9.6	3.0	4.7
48	8.7	3.5	7.8	9.5	3.5	6.7
61	8.5	3.8	5.5	9.3	3.5	4.1
70	9.0	3.1	6.6	9.2	3.0	4.9
65	8.9	3.7	5.0	9.3	3.5	3.3
58	8.4	3.1	3.7	9.4	3.1	3.4
79	8.5	3.7	3.9	9.3	3.3	4.0
57	8.9	3.7	3.2	9.1	3.5	6.0
43	8.4	3.0	3.2	8.8	3.1	3.7
49	8.7	3.7	5.8	9.1	3.5	4.4
59	9.3	3.0	4.2	9.9	3.1	4.3
40	9.4	3.4	3.5	9.4	3.7	3.1
Mean 59.6	8.8	3.4	5.0	9.2	3.2	4.3

Table IV

Females

	Mean Change	Variance	Standard Deviation	Standard Error	"t" Value	P
Serum calcium	+.22	.266	.543	.1629	1.34	0.25
Alkaline Phosphatase	-1.03	.722	.895	.268	-3.8	<.01

Table V

Males

	Mean Change	Variance	Standard Deviation	Standard Error	"t" Value	P
Serum calcium	+.3529	.1436	.3907	.0919	3.84	<.01
Alkaline Phosphatase	-.7882	1.282	1.16	.2746	2.87	<.01

Discussion

The adverse effect of anticonvulsant therapy on calcium and phosphorous metabolism has been extensively documented as resulting from a disruption of hydroxylation of vitamin D in the liver. In children and crib-bound institutionalized patients, the effect is more striking than in adult ambulatory patients and several studies have suggested that older individuals do not manifest alterations in serum calcium phosphorous or alkaline phosphatase levels.^{5,6} In elderly epileptic patients, in particular, alterations in these blood levels are rare although in these patients the seizure disorders tended to be less longstanding and usually were related to acquired cerebrovascular disease.

We have found that ambulatory, middle-aged and elderly patients, with prolonged treatment with diphenylhydantoin sodium and phenobarbital for grand mal epilepsy had, in general, low normal serum calcium levels, normal serum phosphorous levels, and slightly elevated alkaline phosphatase levels. Their blood values appeared consistent with mild anticonvulsant osteomalacia, although none of these patients had a history of pathologic fractures or skeletal deformity. During an eight-month period of treatment with 50,000 units of vitamin D (ergosterol) orally once weekly, male patients showed no ill effects clinically but did show a statistically significant rise in the serum calcium levels to mid-normal ranges at the end of that period.

Both males and females showed a statistically significant drop in the alkaline phosphatase level to normal levels. The vitamin D dosage did not precisely replace 25-hydroxycholecalciferol lost in the disruption of hepatic hydroxylation of cholecalciferol, but it appears that this relatively moderate non-toxic dose of commercially available vitamin D was sufficient to overcome the metabolic effect of the anticonvulsant medication to bring the blood levels of calcium and alkaline phosphatase toward more normal ranges.

The normal ranges had been established in our laboratory by averaging the serum calcium, phosphorous and alkaline phosphatase levels on eighteen, healthy, age-matched patients who had not taken anticonvulsant medications.

Conclusion

Moderate doses of commercially available vitamin D (ergosterol) preparations altered the serum calcium and alkaline phosphatase levels in ambulatory adult patients who were under long-term treatment with diphenylhydantoin sodium. Prophylaxis with vitamin D against anticonvulsant osteomalacia appears safe and effective in returning the serum calcium and

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'MAC' rules**

**Drug
Substitution**

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Mailgram

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Medicine today is in the spotlight, subjected to all kinds of scrutiny. Your control over patient therapy is being monitored, judged and occasionally abrogated, sometimes by unknown third parties.

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Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your non-generic prescriptions be filled with the precise products you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original NDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is a Federal regulation designed to cut the Government's drug bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only for the cost of the lowest-priced, purportedly equivalent,

generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than \$1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

It could make a difference in your practice tomorrow.



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The management of the solitary breast mass including needle aspiration, observation, and indications for excision is discussed. Two case reports are included to demonstrate the potential fallibility of palpation and mammography in the diagnosis of palpable lesions. Emphasis is placed upon the need for resolution or excision of all dominant solitary breast masses.

Management of the Solitary Breast Mass

**Murray H. Seltzer, M.D. and
H.S. Fletcher, M.D., Livingston***

In recent years a heightened public interest in the management of breast disease has led to numerous controversies over the correct surgical treatment of breast cancer in the professional and public media.^{1,2} Debate includes the value and utilization of x-ray examination of the breast and controversy concerning conventional mammography versus xeromammography.³ In light of these varied controversies, the management of the solitary breast mass has been affected and some physicians feel it is reasonable to observe a breast mass only if it "feels" benign and does not change size. Others find it acceptable to watch a breast mass if the mammogram confirms the clinical evaluation that the lesion is benign.

The following case reports serve as examples of patients with deceptive breast lesions and in this light it seems wise to review the management of the solitary breast mass.

Case One

A 46-year-old female presented with a tender nodule of the right breast. The patient denied any change in the size of the lesion and stated that it had been present for approximately two years and initially had been detected by herself. Her physician examined her periodically over the two years and noted that the lesion felt benign and unchanged in size. Mammography had not been performed. Her past history revealed that she was Gravida III Para III and at age 23 gave birth to her first child. Menarche was at age 10. The patient's family history was negative for carcinoma.

Physical examination revealed a 1 cm. \times 1 cm. mass in the upper outer quadrant of the right breast near the periphery, and an attempt at aspiration was unsuccessful. The lesion was particularly round, smooth, and slippable and had the characteristics of a fibroadenoma.

Following surgical consultation, the patient was referred for xeromammography, and the report did not identify the mass and revealed only benign bilateral findings. The patient had

an excisional biopsy performed, at which time an infiltrating ductal carcinoma was identified and a modified radical mastectomy was performed revealing 0 out of 15 nodes positive.

Case Two

A 34-year-old female initially was noted to have a palpable upper outer quadrant left breast mass and was referred for xeromammography. The mammogram was reported as benign and the patient was observed for an additional three months, at the end of which there appeared to be a slight enlargement in the mass. The patient was referred for surgical consultation.

The patient's past history revealed that she was a Gravida III Para III, and was 21 years old when she gave birth to her first child. The patient had used birth control pills for greater than five years. Of particular note was the fact that her paternal grandmother and a first cousin both had breast cancer.

On physical examination, the patient had a 2 cm. \times 2 cm. mass in the upper outer quadrant of her left breast, and an attempted needle aspiration was unsuccessful. The patient subsequently had a biopsy at which time infiltrating ductal carcinoma was identified and a left radical mastectomy revealed 0 out of 19 nodes positive.

Initial Approach to the Solitary Breast Mass

One must first establish by palpation the presence of a discrete breast mass as opposed to an irregular lumpy area as is seen in cystic mastitis. With the identification of a discrete mass, the first approach is to insert a needle attached to a syringe with the intent of aspirating a cyst should one be present. The value and safety of needle aspiration has been well documented.⁴

A #18, #20, or #22 gauge needle attached to a 10cc or 20cc syringe easily can accomplish this

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purpose. Local anesthesia is not necessary as its introduction actually causes more discomfort than the rapid insertion of a disposable needle directly into the mass. The skin is prepared with alcohol and allowed to dry prior to puncture. A successful aspiration results in the immediate, complete disappearance of the punctured mass without recurrence at a subsequent examination two weeks later. Should the mass not resolve completely with aspiration, not empty at all with aspiration, yield a bloody aspirate, or recur at a subsequent examination, excision of that mass is recommended. Fluid aspirated from a cyst is submitted for cytology if it is particularly cloudy or bloody. If a small amount of aspirant is obtained from a particularly suspicious lesion, a smear is made, fixative applied, and cytology obtained.

Occasionally a rather large cyst requires a second aspiration to obliterate its walls permanently. If the aspiration of a mass is unsuccessful, only a band-aid is applied to the puncture site. However, if the aspiration is successful, an effort is made to oppose the walls of the cyst with a pressure dressing.

The Role of Mammography

A mammogram is intended to identify nonpalpable pathology within the breast. Its role is not to reassure the physician that a palpable mass is safe to leave within the breast.^{5,6,7}

It is advisable that patients over the age of 30 who are about to undergo a general anesthetic for an excision of a breast mass have a mammogram prior to that operation. It is not infrequent that the actual mass in question is benign and a nonpalpable, undetected lesion that is either suspicious or frankly malignant is evident on the mammogram.

At times, one is not certain whether a discrete solitary mass is or is not being felt, and one is suspicious that the lesion palpated represents a confluent area of cystic disease. It is certainly reasonable to observe lesions of this type. However, a definitive decision should be reached within three months or three menstrual cycles that this lesion either does or does not represent a solitary mass or suspicious area.

The great psychological advantage to the patient of having a mass aspirated within the office with complete resolution certainly is obvious. If the patient is always to think that the presence of a mass means a hospitalization, an anesthetic, an operation and associated fears, she certainly will be reluctant to seek the help of her physician. However, if she realizes that the entire problem possibly can be resolved within a few minutes in the physician's office, she will be encouraged to come for treatment.

When excision of a lesion is indicated, the patient need not acquiesce to immediate mastectomy if she does not so desire. An interval of approximately one to two weeks between biopsy and mastectomy has been shown to be safe in terms of morbidity and mortality associated with breast cancer.^{8,9} Thus, for the patient who is reluctant to consent to a biopsy, frozen section, and immediate mastectomy, it is reasonable to assure the patient that only a biopsy will be performed at the initial operation. She will then have a subsequent opportunity to discuss the pathology report and mastectomy should a malignancy be discovered.

In conclusion, all palpable solitary breast masses eventually must be definitively dealt with either by successful aspiration or by complete excision.

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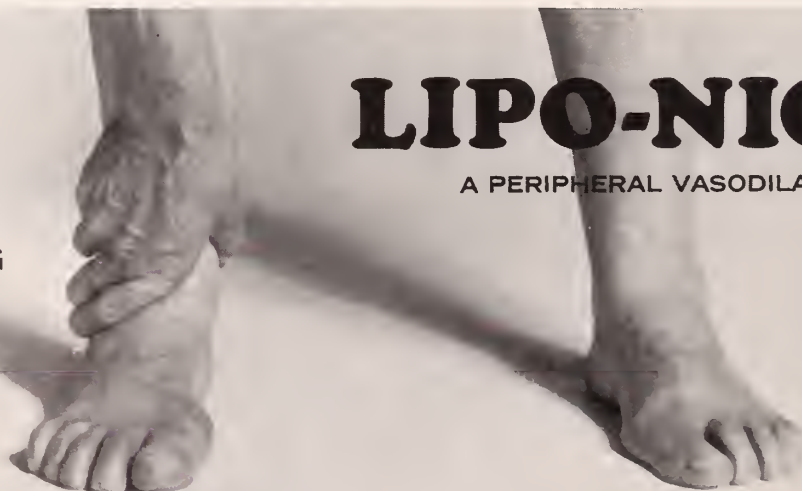
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A gender dysphoria program for the treatment of transsexualism established at the New Jersey Medical School is described. A brief introduction to the problem of dysphoria and the history of gender clinics and an outline of our treatment program for transsexuals are presented. A summary of the legal status of transsexuals as it relates to health insurance, disability, and so on is described.

A Gender Dysphoria Program in New Jersey

Richard M. Samuels, Ph.D., Harish K. Malhotra, M.D., and Mona M. Devanesan, M.D., Newark *

Benjamin (1953) is credited with first identifying and naming the most clearly definable gender dysphoric condition, transsexualism.

Gender dysphoria syndrome is a descriptive term encompassing clinical situations or a set of psycho-social symptoms and/or behaviors that have been reported by a group of deeply troubled and often desperate patients seeking gender re-orientation, including surgical sex conversion (Fisk, 1972). The degree to which an individual engages in such behaviors and the ultimate goals of such behaviors determine the specific diagnostic category within the broad concept of gender dysphoria. In the classic sense, the transsexual reports a history of dissatisfaction with the biological gender from early in childhood. This would include a preference for opposite sex clothing, toys, and playmates. These patients often cross-dress from an early age to conform with the desired gender, but it should be noted that they report no sexual arousal or excitement from cross-dressing. These individuals ultimately seek and generally obtain hormone therapy to help change their bodies to conform more with the psychological gender, while many request sex reassignment surgery.

History of Gender Clinics

The first organized gender dysphoria clinic in America was begun at The Johns Hopkins University Medical Center in 1963 where Drs. Richard Green and John Money embarked on a study of transsexualism. Their pioneering work

set many precedents in the treatment and evaluation of transsexuals and other gender dysphoric patients. Additional programs became established throughout the United States in the following years, notably at Stanford University Medical Center. Early support for transsexuals and their problems came from the Erickson Educational Foundation, a non-profit organization headquartered in Baton Rouge, Louisiana. Their program was one of education and financial support for the study and treatment of gender dysphoria. Recently, however, the Erickson Educational Foundation has reduced its degree of financial aid, although they are still active in the educational aspects of transsexualism.

History of the Gender Clinic in New Jersey

The Human Sexuality Program at the New Jersey Medical School was first established in 1972 in response to a need for student education in the area of human sexuality, and also to develop a clinic for the treatment of sexual dysfunction. Our first experience with gender dysphoria occurred in 1973 when we were approached by a post-operative male to female transsexual. It was apparent that this patient's case had been mismanaged. With *no pre-operative preparation*, this individual had gone to Casablanca for a sex reassignment procedure and returned to the New Jersey area *two weeks after* the surgery was completed. The patient was totally unprepared to live the life of a female and

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manifested severe emotional problems. There being no programs for patients of this type in the area, we decided to see her in our sexual guidance clinic. Initially, as with other programs, we at the New Jersey Medical School's Sexual Guidance Clinic also considered transsexualism synonymous with gender dysphoria. Our initial enthusiasm resulted in presentations within the medical school, discussions presented on the radio, and talks to various non-professional groups. Apparently our appearances were well received, as we rapidly increased our case load of "transsexuals." Very quickly we had six patients and within one year we had developed a program that included approximately 40 patients in the gender dysphoria clinic. Our patients reported a vast untapped population of transsexuals and other gender dysphoric individuals in the community. In an attempt to deal with these people more efficiently, the Gender Dysphoria Program was inaugurated in 1974. The goals of the program were to develop procedures for the medical management of pre-operative and post-operative hormonal therapy. In addition, we endeavored to provide psychological and psychiatric consultation.

Before patients were admitted to the program, they were subjected to extensive medical and psychiatric evaluation to determine their diagnostic category. In order to make diagnostic placement somewhat clearer we divided our patients into three groups: transsexuals, effeminate homosexuals, and indeterminate patients. We made it very clear to our patients that they were welcome to be members of our program regardless of their intention for sex reassignment surgery. We found a degree of relief in those patients diagnosed as effeminate homosexuals, for they were able to confide in us their true intentions in undergoing feminization.

Originally, The Johns Hopkins University's Gender Dysphoria Clinic reported a ratio of three male-to-female transsexuals for every female-to-male transsexual. However, more recent data suggests that this ratio in the population may actually be closer to one to one (Mehl, 1972). This has not been our experience in the gender clinic at the New Jersey Medical School. Indeed, we currently have four female-to-male patients with approximately 40 male-to-female

patients. We suspect that this distribution of patients may be due to the particular socioeconomic source of our patients who largely come from Newark, New Jersey.

Early in the development of gender clinics, it was discovered that not all patients experiencing gender dysphoria desired a complete sex reassignment. There were individuals who were satisfied with feminized bodies but who did not desire or feel the need to have genital surgery. At the Stanford University Gender Program, those patients not desirous of reassignment surgery were excluded. However, it became apparent that the desire for feminization or masculinization as the case may be, motivated non-transsexual patients to verbalize a desire for sex reassignment surgery, because they felt this was a requisite to be included in the clinic program. A few simply wanted to get involved with some form of supervised program of hormone administration. Once this was realized, the type of patients admitted to gender programs was broadened to include those who, although experiencing a gender dysphoric state, did not wish to undergo complete sex reassignment. We use the following as diagnostic categories: (1) the classic Benjamin transsexual, (2) the effeminate homosexual, (3) the transvestite, (4) the gender dysphoric patient with schizoid personality features, and (5) the gender dysphoric patient with psychosis in remission. The further elucidation of these categories has been cited elsewhere (Fisk, 1972).

Present Program

Our patients meet every other week for two hours. Alternating weeks are utilized for intake procedures and individual counseling for those patients in need of psychotherapy. The surgical and post-operative rehabilitation procedures dominate the discussions in the transsexual groups. Attendance at group sessions when hormone prescriptions are issued is good; however, attendance drops at those sessions when prescriptions are not being distributed. Our patients are requested to pay a fee for these services based on a sliding scale.

Hormonal management consists of various combinations of estrogen and progesterone for male-

to-female transsexuals and of testosterone for female-to-male transsexuals as described by Benjamin (1969). Currently we do not use injectable forms of these medications as we do not have the proper facilities to do so. Patients approved for sex reassignment surgery are currently being referred to surgeons in New York. We are awaiting a legal decision from the State Attorney General regarding the possibility of performing the operation here. Interest has been expressed by the plastic surgery department.

The development of the gender dysphoria clinic was not and is not without its problems. In our experience, gender dysphoria is an area that generates little enthusiasm among different professions. This was indicated by a poor response to a letter to various departments throughout the medical school which attempted to enlist aid in setting up the program.

Medical Insurance for Transsexuals

The status of transsexuals regarding medical insurance in New Jersey is not clear. We have been informed by the Erickson Educational Foundation that Blue Cross/Blue Shield and Travelers, Equitable, and Prudential Insurance Companies have paid some benefits for transsexual surgery at different times. The Erickson Foundation cautions patients that these insurance companies will not pay in every case but that they are more likely to pay than others. It has been determined that New Jersey Blue Cross and Blue Shield will pay for transsexual surgery after a one year waiting period on the insurance policy. However, a clause stating that pre-existing conditions are not covered under this insurance plan would tend to produce difficulties for the transsexual, whose condition begins in childhood.

We have been instrumental in having the State of New Jersey Medicaid program pay for sex reassignment procedures in 15 cases. This is the first time that a state medical agency has considered transsexualism to be a medical disorder requiring surgical correction.

Legal Status of Transsexuals in New Jersey

The legal aid agencies of the City of Newark and of Passaic County have been helpful in deter-

mining the legal status of transsexuals in the State of New Jersey. Transsexuals, as well as other individuals, wishing to change their names may now do so with a streamlined procedure that involves minimal cost. Name changes are being permitted prior to sex reassignment surgery. The State Motor Vehicle Bureau has, on request, changed the designated sex on a driver's license for our patients prior to transsexual surgery.

Some of our patients report having been questioned by police for alleged female impersonation. The legal profession seems more tolerant of the gender dysphoric condition than do the police as in most cases these charges have been dropped once the patients have been brought to trial. Within the State of New Jersey there have been few legal cases that have bearing on transsexual patients. A postoperative male-to-female transsexual, whose husband paid for her operation prior to legal marriage, sued her husband for divorce. This action was taken after he was found to be committing homosexual acts with other males. In this case the judge awarded the female transsexual full rights of alimony. It was declared that a postoperative female transsexual, whose husband is informed of her condition prior to the marriage, is eligible for all the rights that a biological female is entitled to in a divorce action. In another court case a husband requested an annulment of marriage from his transsexual wife. He claimed that he had not been informed of his wife's premarital life as a male. The judge decided in the male's favor citing false representation as the grounds for annulment. The legal status of postoperative "male-to-female" transsexuals in New Jersey is such that they are granted the rights of females in marriage situations as long as the husbands are aware of the patient's gender status prior to marriage.

Employment Status and Disability Benefits

We have been able to obtain disability benefits for a number of our patients who have been unable to work due to their condition. The grounds for disability coverage are psychological and social. Many transsexuals are able to perform their jobs, but have difficulty obtaining employment because of discrimination by employers towards transsexuals. Many of our trans-

sexuals, who were gainfully employed found themselves unemployed after being discovered in their cross-gender role. Discrepancies between identification involving names and sex is also a source of difficulty for transsexuals.

Recently, the Department of Consumer Licensing has, in at least one situation, reissued a new certificate with a changed name prior to sex reassignment surgery. One of our patients, given to full-time cross-dressing, changed her residence to eliminate the difficulties of being detected in female attire. She had a successful job interview in the female gender and at the conclusion of the interview, when it appeared that she was about to have the job, she informed the interviewer of her transsexual condition. The personnel office contacted us, and we gave a letter of recommendation which helped the patient secure the position.

Our patients report feelings of discrimination on the basis of sexual and gender preference. The most common complaint is that they have neither the rights of a male nor the rights of a female. To the police they are female impersonators. In an attempt to counter this, we have issued identification cards similar to those supplied by the Erickson Educational Foundation. These describe the function of our clinic and inform the reader that the patient is under medical supervision and is also approved for cross-dressing. In a number of cases, these cards have minimized police questioning of patients who were stopped.

A number of our patients have admitted openly that they have worked or are currently working as prostitutes due to their inability to find other employment. The majority of our patients come from the low socio-economic areas of New Jersey. Jobs for non-skilled individuals are hard enough to come by, let alone jobs for unskilled transsexual patients. The fact that a number of our patients have been or are now prostitutes has raised differences of opinions among the personnel of the gender dysphoria clinic.

Conflict of Ideologies and Questions for the Future

We began our program under the assumption that all patients seeking the services of the

gender dysphoria clinic would be "transsexuals." As we now know, this is not true. Approximately 75 percent of our present patient population are transsexuals, while the other 25 percent are effeminate homosexuals. Some staff members feel that the gender dysphoria program should continue to serve only the true transsexual patient. Others feel that all forms of gender dysphoria, including effeminate homosexuals, should be treated. It is felt by some that the gender dysphoria clinic was being "used" by the effeminate homosexuals to grow breasts and appear to be more feminine. They feel that the enlarged breasts was simply a way of increasing the income of some of them as prostitutes. The other point of view is that gender dysphoria is not synonymous with transsexualism; rather that it covers a spectrum of conditions, including transsexuals, effeminate homosexuals, and other forms. The one common desire shared by all was to appear more like the opposite of their biological sex. Only the transsexuals desired the complete reassignment surgical procedure. Fisk (1972) has described similar stages in the development of another gender dysphoria program at the Stanford University Medical Center. They managed this problem by creating indefinitely long grooming classes for those patients here classified as indeterminate and effeminate homosexuals. In contrast, we have made it clear to these patients that they are *not* transsexuals and that it is *not necessary* for them to have the operation in order to be a member of the program. However, we recently have initiated a new screening procedure so that only those patients diagnosed as transsexuals are accepted. We feel that this will make us better able to serve the needs of our patient population.

We feel that there is a strong need for our medical-school-based gender dysphoria program—a program that can integrate all aspects of this most perplexing psycho-physiologic condition.

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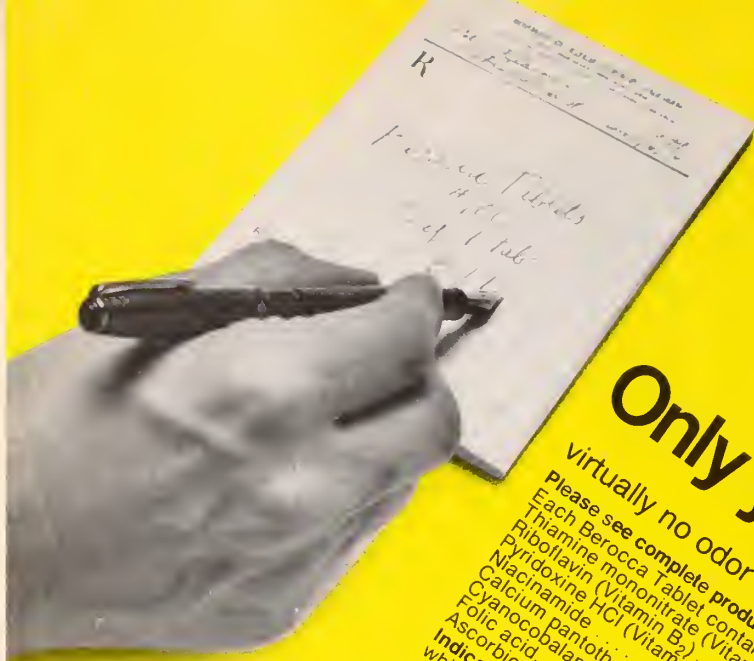
Baylor College of Medicine
Houston, Texas
Dr. Raymond H. Kaufman

Mayo Clinic
Rochester, Minnesota
Dr. David G. Decker

The Mayo Clinic coordinates the efforts of the institutions participating in the National Cancer Institute study. Dr. Leonard T. Kurland, Chairman of the Department of Epidemiology and Medical Statistics at Mayo, directs the study's National Coordinating Center.

Project Director at the National Cancer Institute, Division of Cancer Control and Rehabilitation, is Dr. Mary Ann Sestili, Room 6A07, Blair Building, 8300 Colesville Road, Silver Spring, Maryland 20910—(301) 427-7477.

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CASE REPORTS

A case is reported of a persistent aneurysm of the membranous ventricular septum associated with a small ventricular septal defect documented angiographically by repeat cardiac catheterization after an interval of eleven years. This report, the longest follow-up in the literature, re-emphasizes the benign nature of the lesion.

Long-Term Follow-up of a Congenital Aneurysm of the Membranous Ventricular Septum

Won K. Lee, M.D., S. S. Ahmed, M.D.,
A. B. Weisse, M.D., T. J. Regan, M.D.,
and G. E. Levinson, M.D., Newark*

Despite many reports on congenital aneurysm of the membranous ventricular septum, information on the long-term history of this lesion is still incomplete. Freedom, *et al.*, on the basis of information obtained in 20 patients from catheterizations four years apart, concluded that this lesion is benign and has an uncomplicated clinical course.¹ However, it was recently suggested that septal aneurysms encountered during surgery for various other cardiac abnormalities be resected or imbricated to prevent further enlargement and ensuing complications.² This report describes a patient with clinical and angiographic follow-up over a period of eleven years and illustrates the benign nature and stable anatomy of this lesion.

Case Report

A female infant was born after a normal, uncomplicated pregnancy. At four weeks of age, a murmur was detected by her private physician and a tentative diagnosis of ventricular septal defect was made. Her growth and development were normal and she suffered no major illnesses or complications. At four years of age, she was referred to our hospital for cardiac catheterization.

Physical examination revealed a systolic thrill and a high-pitched, grade V/VI, pansystolic murmur in the third and fourth left intercostal spaces radiating over the entire precordium. The second sound was normally split. A systolic click was heard at the apex and base. An electrocardiogram (ECG) (Figure 1A) revealed a normal sinus rhythm, a QRS axis of -15° in the frontal plane, but no other evidence of left ventricular hypertrophy. The chest x-ray (Figure 2A) revealed slight cardiomegaly, left ventricular enlargement, and normal pulmonary vasculature, but no prominence of the pulmonary artery segment.

Cardiac catheterization in April 1964 revealed a 0.9 ml/100 ml step-up in blood oxygen content at the ventricular level.

The estimated pulmonary to systemic flow ratio was 1.4. Pulmonary resistances were normal. A cineangiogram of the left ventricle (Figure 3A) showed an aneurysm of the membranous septum with contrast medium traversing an orifice in the aneurysm to enter the right ventricle.

The child was followed at regular intervals for the next eleven years during which she remained asymptomatic. A second catheterization was performed at age 15, in August 1975. Physical examination at this time revealed a grade II/VI long ejection systolic murmur at the third and fourth left sternal border without any radiation. There were no thrills or systolic clicks. An ECG (Figure 1B) revealed regular sinus rhythm with a normal frontal plane QRS axis. The chest x-ray (Figure 2B) revealed a normal cardiothoracic ratio with normal pulmonary vasculature. Lateral and oblique radiographs of the chest with barium swallow revealed left atrial enlargement and slight left ventricular enlargement. An echocardiogram showed normal movement of the anterior leaflet of the mitral valve and of the interventricular septum.

Right and left heart catheterization demonstrated only a 0.4 ml/100 ml step-up in oxygen content between the right atrium and right ventricle. Cardiogreen® dye[†] indicator-dilution curves sampled from the aorta with injections into the pulmonary artery showed a small but characteristic downslope deformity consistent with left-to-right shunting. The shunt was also demonstrated by early appearance of dye in curves sampled from pulmonary artery and right ventricle after dye injections into the left ventricle. The estimated left-to-right shunt by oximetry was 0.5 l/min with a pulmonary systemic flow ratio of 1.1. Systemic and pulmonary vascular resistances and cardiac index were normal.

A left ventricular cinefluorogram (Figure 3B) obtained in the left anterior oblique position revealed a multiloculated aneurysm high on the membranous septum with radiopaque

*From the Division of Cardiovascular Diseases, Department of Medicine, College of Medicine and Dentistry of New Jersey — The New Jersey Medical School, Newark, New Jersey. Supported in part by a grant from the National Heart and Lung Institute (Post-Graduate Training Grant #HL05510), a grant-in-aid from the Essex County Heart Association (GR-75 ES2). Please address reprint requests to: Dr. Won K. Lee, Division of Cardiology, Bldg. #16, New Jersey Medical School, 100 Bergen Street, Newark, New Jersey, 07103.

†The Cardiogreen® dye was kindly supplied by Hynson, Westcott, and Dunning.

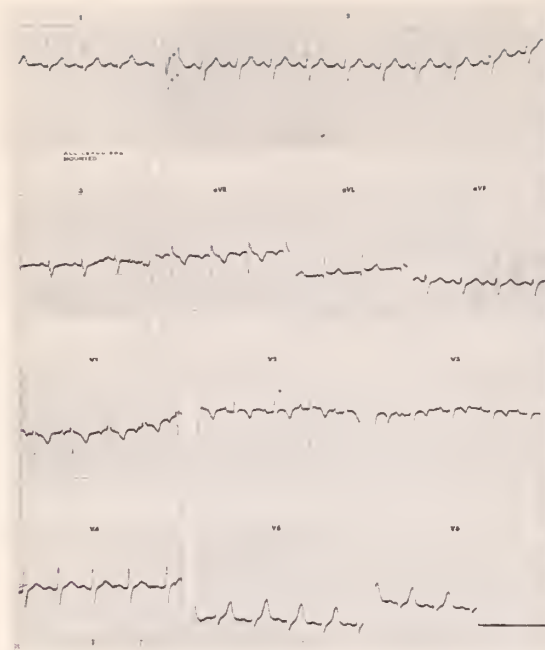


Figure 1A — Electrocardiogram at age four showing regular sinus rhythm, and QRS axis of -15° in the frontal plane with no other evidence of left ventricular hypertrophy.

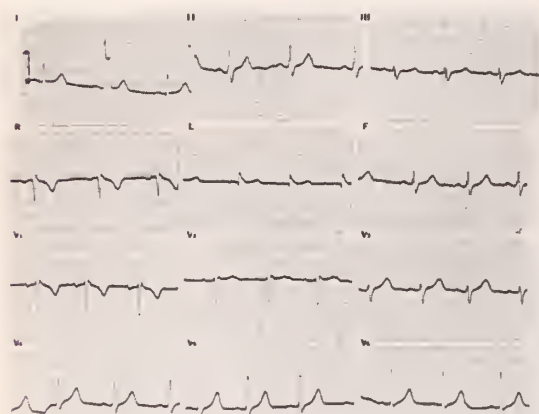


Figure 1B — Electrocardiogram at age 15, showing regular sinus rhythm and QRS axis of 0° in the frontal plane.

material entering the right ventricular outflow tract from the inferior aspect of this aneurysm. An aortic root angiogram demonstrated a redundant prolapsed non-coronary cusp but no aortic regurgitation.

Discussion

Aneurysm of the membranous ventricular septum was once regarded as a rare congenital lesion found only at autopsy. However, since the first *in-vivo* diagnosis by Steinberg³ in 1957 by

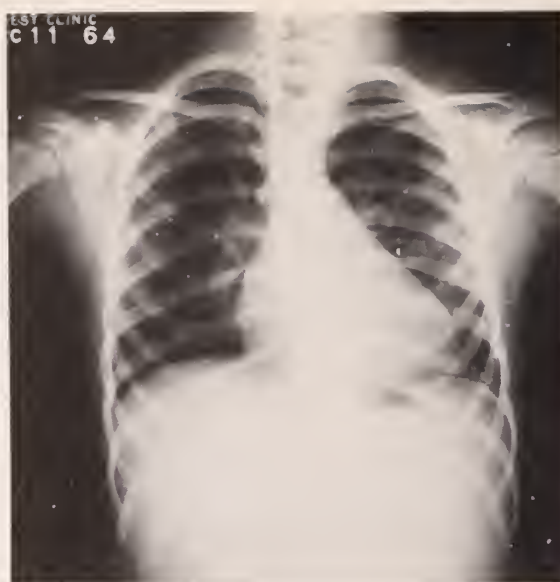


Figure 2A — Chest roentgenogram at age four, showing increased cardiothoracic ratio and normal pulmonary vascularity.



Figure 2B — Chest roentgenogram at age 15 showing a normal cardiothoracic ratio and normal pulmonary vascularity.

means of angiography, many cases have been reported and it has become clear that aneurysm of the membranous septum is a common lesion among children with small ventricular septal defects.^{4,5,6} Although much attention has been focused on the observation that functional diminution or spontaneous closure of a membranous ventricular septal defect may be accom-



Figure 3A — Age four: Opacification of left ventricle and great vessels in the left anterior oblique position after left atrial injection of contrast agent demonstrating aneurysm of the membranous ventricular septum.



Figure 3B — Age 15: Persistent aneurysm of the membranous ventricular septum opacified by injection of contrast agent in the left ventricle in the left anterior oblique view.

panied by formation of an aneurysm-like deformity,^{4,5} its long-term follow-up is unknown. The longest previous follow-up of this lesion, based on repeat catheterizations in 20 patients four years apart, showed no complications attributable to the aneurysm's presence nor change in its size.¹ Although the literature contains reports of serious complications, such as enlargement of the aneurysm with obstruction of the right ventricular outflow tract, arrhythmia,

thrombosis with embolism, dissection outside the heart, and subacute bacterial endocarditis,^{7,8,9} these have been extremely rare. Vidne,² however, in reporting one hospital death due to subpulmonic obstruction in a patient with aneurysm of the membranous septum in association with transposition of the great arteries and ventricular septal defect, suggested that this lesion should be resected or imbricated in order to prevent further enlargement and its ensuing complications.

Although more studies are warranted to define the frequency and the scope of complications observed over an extended period, we and several other authors^{1,4,5} feel that most of the patients with aneurysm of the ventricular septum experience a benign, asymptomatic course.

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Solitary ulcer of the rectum is an obscure disease with an even more obscure etiology. Less than one hundred cases have been reported in patients generally less than fifty years of age with equal sex distribution. This entity is easily misdiagnosed, may be mistaken for malignancy, produces numerous hardships for the patient and is a considerable therapeutic challenge to the physician. This case illustrates the most virulent course of this malady resulting in abdominoperineal resection.

Solitary Ulcer of the Rectum

Case Report and Review of the Literature

**Rade Pejic, M.D. and
Joseph A. Kuchler, M.D., Camden**

Solitary ulcer of the rectum is a relatively rare entity. To date, only about one hundred cases have been reported in the literature, the first description having been made by Cruveilhier in 1830.² The disease itself is about eighty times less common than ulcerative colitis. Allen¹ and Epstein, *et al.*⁶ described what appears to be a similar or related pathological condition. The term, solitary ulcer, was coined by O. V. Lloyd Davies at the St. Mark's Hospital in London over thirty years ago.⁹

Two classic reports and comprehensive reviews on this subject were published by Haskell and Rovner⁷ who reported four cases in their publication in 1965, and by Madigan and Morson⁹ who researched sixty-eight cases collected over a 36-year period at St. Mark's Hospital, London.

This communication will report an additional case which had a particularly virulent course, unlike the usual natural history of this disease process.

Case Report

A 27-year-old married female first presented at the Cooper Medical Center on May 8, 1975 with abdominal pain and rectal bleeding of approximately two years' duration. About six weeks after giving birth to twins in July, 1973, she began having crampy, lower abdominal pains, rectal bleeding and the passage of mucus on defecation. The pain centered in the left lower quadrant and was associated with a sensation of heaviness in the rectum. Bleeding occurred at various times — after a bowel movement or straining or even when walking. There was a long history of constipation, i.e., a bowel movement every three or four days after taking a laxative.

In January, 1974 the patient was sigmoidoscoped by a surgeon who found a circumscribed, extremely ulcerated area six cm. above the anal verge. There was a grayish membrane covering the base of the ulcer and the surrounding mucosa appeared vascular. A biopsy revealed focally ulcerated colonic mucosa. Steroid suppositories were prescribed, but the patient never returned for a follow-up. The abdominal pains, rectal pressure, and evacuation of blood and mucus continued and increased in severity.

Sixteen months after the first biopsy, the patient was admitted to the Cooper Medical Center. On physical examination her abdomen was soft but tender in the lower quadrants. There was no guarding, or rigidity, and no masses were palpable. Normal bowel sounds were present. Rectal examination revealed an irregular ulcerated mass on the anterior wall at six cm. Pelvic examination was normal.

On admission, hemoglobin and hematocrit were 11.2 gms. and 34.6%. Urinalysis and urine culture were negative. VDRL, Frei test, coagulation survey, and SMA-12 were all normal. A barium enema x-ray was normal.

Sigmoidoscopy revealed a semicircular, irregular ulcerated area which bled easily. At this time a wedge excision of the ulcerated area was performed. The tissue revealed non-specific mucosal ulceration with extensive submucosal fibrosis and hypertrophy of the muscularis. Her post-operative course was uneventful and she was discharged on May 19, 1975.

On July 6, 1975, the patient was readmitted with recurrent rectal bleeding, which was not quite as severe. Rectal examination and sigmoidoscopy revealed a small irregularity on the anterior rectal wall, which bled easily. A biopsy was obtained and the bleeding areas were cauterized. Microscopic examination revealed a fragment of rectal mucosa showing extensive proliferation of smooth muscle and fibrous tissue occupying the lamina propria and deeper layers. These findings were felt to be consistent with "solitary ulcer of the rectum." Repeat barium enema was normal.

She was taken to surgery and this area was excised again with the same pathologic diagnosis, i.e., solitary ulcer of the rectum. The patient had an uneventful post-operative course and was discharged on July 15, 1975. Nine days later, the patient was readmitted complaining of the same symptoms, namely, rectal bleeding and tenesmus. Rectal examination at this time revealed a one to 1.5 cm. tender and irregular erosion on the anterior rectal wall. A diverting colostomy was

proposed since the patient's symptoms were progressive in nature, however, the patient requested a delay of the colostomy. A trial of prednisolone suppositories and stool softeners was prescribed as an outpatient, but she returned to the hospital three days later, complaining that the bloody mucus, rectal pain, and pressure were unbearable. She did not want to continue with the suppositories. A diverting sigmoid colostomy with mucous fistula was constructed, and the patient was discharged on August 15, 1975 after an uneventful recovery.

Two months later she was admitted for the fifth time with intractable rectal pain, tenesmus, and bleeding. Physical examination at this time revealed a three cm. area of ulceration immediately beyond the anal verge on the anterior wall. She stated that she could no longer tolerate the symptoms. After careful consideration, an abdomino-perineal resection was performed.

The pathologic specimen revealed a poorly circumscribed two by 1.8 cm. ulcer just above the anal verge. The diagnosis was solitary ulcer of the rectum. Her postoperative and subsequent course remained uneventful.

Differential Diagnosis

The clinician occasionally comes upon an ulceration during sigmoidoscopy which does not fit the usual differential of rectosigmoid disease. The initial impression may be "idiopathic proctocolitis" or "chronic granulomatous proctitis." "Atypical" manifestations of regional colitis or ulcerative colitis, as well as early carcinoma of the rectum, also have been considered. The unusual appearance of the ulcer is likely to stimulate a biopsy by the endoscopist with the expectation of definitive diagnosis. However, repeated biopsies and microscopic examinations will show only chronic inflammation and lead to that nonspecific diagnosis of "chronic proctitis." Behcet's disease⁵ should also be considered in the differential diagnosis by a keen clinician.

Clinical Features

Patients with solitary ulcer of the rectum are usually found in the 20 to 50-year age group with no special sex predilection. No correlation has been found with occupation, social class, race, foreign travel, smoking, drinking, or family history of the condition.⁹ Madigan and Morson⁹ reported that 12 percent of their patients were mentally disturbed and 25 percent had local rectal pain or discomfort, diarrhea, or constipation.

Some patients may present with slight bleeding on defecation, rectal prolapse, or left iliac fossa

pain.⁸ There are no systemic symptoms or changes in bowel habit. The condition may remain static for years although some patients may experience weight loss and rectal strictures may develop. These ulcers are notoriously resistant to treatment and may recur even after local resection. The condition is benign, but three cases of massive hemorrhage have been reported.³

Etiology

After extensive investigation of almost a hundred patients, no definite etiologic agent has been found. Primary vascular abnormality has been considered; in one interesting case, an endarterectomy of the inferior mesenteric artery,⁴ with a Teflon[®] patch to enlarge the lumen, resulted in healing of the rectal ulcerations and disappearance of rectal bleeding and mucus discharge. Primary mucosal abnormality has been considered also.

Chemical lesions (as seen in patients receiving fluorouracil, frequent enemas, or aminophylline suppositories), self-inflicted trauma (20 percent of the cases in one series), stercoral ulceration,¹⁰ sexual perversion, constipation, malignancy, and granulomatous diseases have also been considered and discarded.

Other interesting possibilities include amebiasis, syphilis, lymphogranuloma venerum, and a mild form of ulcerative colitis. As a result of numerous microscopic examinations, a hamartomatous origin and congenital duplication of the rectal mucosa were also considered as an etiologic possibility.

Gross and Microscopic Pathology

The rectal ulcer appears deep, solitary (in 70 percent of cases), punched out, and stellate. It measures one to three centimeters in diameter and is usually found in the anterior wall of the middle third of the rectum. The surrounding tissue is hyperemic and granular, but the rectum is otherwise normal.

The base of the ulcer is clean and glistening. The rectal folds, where the ulcer is usually found, are prominent and associated rectal prolapse may be present.

A non-specific, chronic, inflammatory change with fibrosis at the base is seen on microscopic examination. The surface of the ulcer is covered by an inflammatory exudate which is rich in polymorphonuclear leucocytes. Endothelial hyperplasia and goblet cell depletion are seen, but multinucleated giant cells and lymphoid hyperplasia are absent.

The ulcer usually penetrates to the inner muscularis where necrotic cells, vascular granulation tissue and dense submucosal fibrosis are seen.¹¹ Islands of misplaced mucosa with cystic dilatation in the submucosa may also be seen.¹²

Treatment

The treatment of solitary ulcers of the rectum is a function of their natural history. They may heal spontaneously, and require no treatment. In some instances, as reported in our case, the virulent nature of the rectal ulcer may necessitate an abdomino-perineal resection which is the ultimate treatment of this unpredictable pathological entity.

The chronicity of this disease, whose relapsing nature and obscure etiology have eluded definition, has resulted in a multitude of therapeutic approaches. Anticholinergic agents, sedatives, antibiotics, prednisolone enemas and suppositories, local and systemic chemotherapy, salazopyrin, caustic agents, diathermy and cauterization all have been tried. It is quite obvious that these regimens reflect only the fact that numerous etiologies and treatments have been considered and discarded.

Summary

Solitary ulcer of the rectum is a rare disease entity whose diagnosis is usually made after exclusion of other more common rectal pathology. The disease is chronic and relapsing, and afflicts equal numbers of males and females in the 20 to 50-year age group. The differential diagnosis should include chronic granulomatous proctitis,

regional colitis, ulcerative colitis, carcinoma of the rectum, and Behcet's disease. Its etiology is obscure, even though cases with a history of rectal trauma, perversion, vascular abnormalities, exposure to various infectious agents, and hamartomas have been reported.

The ulcers are usually solitary and located on the anterior portion of the middle third of the rectum. A non-specific inflammatory response with numerous PMN's is always seen on microscopic examination. Spontaneous resolution may occur, but prednisolone enemas and suppositories, local excision and diverting colostomies have been used; anterior resections and abdomino-perineal resections have been required in the most virulent cases.

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A planning grant from the Robert Wood Johnson Foundation has been used to develop a model whereby a medical school department of family medicine will help its affiliated family practice residency programs to monitor the quality of the educational experience they are offering to their residents. The project has two major goals. The first is to help the community hospital programs assess the clinical knowledge and skills of their incoming residents and to track their learning progress in relation to the "Competency-Based Objectives for Family Physicians" developed by Baker and Gordon.[†] The second is to assess and upgrade the clinical performance of the family physicians who precept residents in the model units and to help them strengthen their academic competencies in the areas of educational planning, teaching, confidence, and research skills.

Quality Assurance in Graduate Education in Family Medicine

Georgia R. Sadler, M.B.A. and Frank C. Snope, M.D., Piscataway*

The underlying premise of CMDNJ—Rutgers Medical School's Department of Family Medicine is that primary care delivery is best learned in primary care settings, provided that there is support from a strong academic base with multi-disciplinary resources. Having no primary care teaching sites, the Department concluded that the development of family practice residency programs in community facilities was the most viable option for training the large number of family physicians required by New Jersey. The Department sought to establish affiliations with community hospitals which either had a family practice residency program or desired to develop one. To date there are four active, AMA-approved, community hospital programs, each with its own admissions' policy, faculty, curriculum, and financing schemes; all are functioning independently under the academic "umbrella" of the Department (see Tables 1 through 5).

The Department and its affiliated community hospitals agreed that the hospitals would provide the primary care sites and the faculty, and the Department would make available to the hospitals its multidisciplinary resources and provide technical assistance and support where they are needed. An example of this cooperative undertaking can be seen in the research which is now being started. Common to all the residency program directors was the desire to find a means to maximize the educational experience the programs offer to their residents and to assure the residents that as a result of participating in these residency programs they

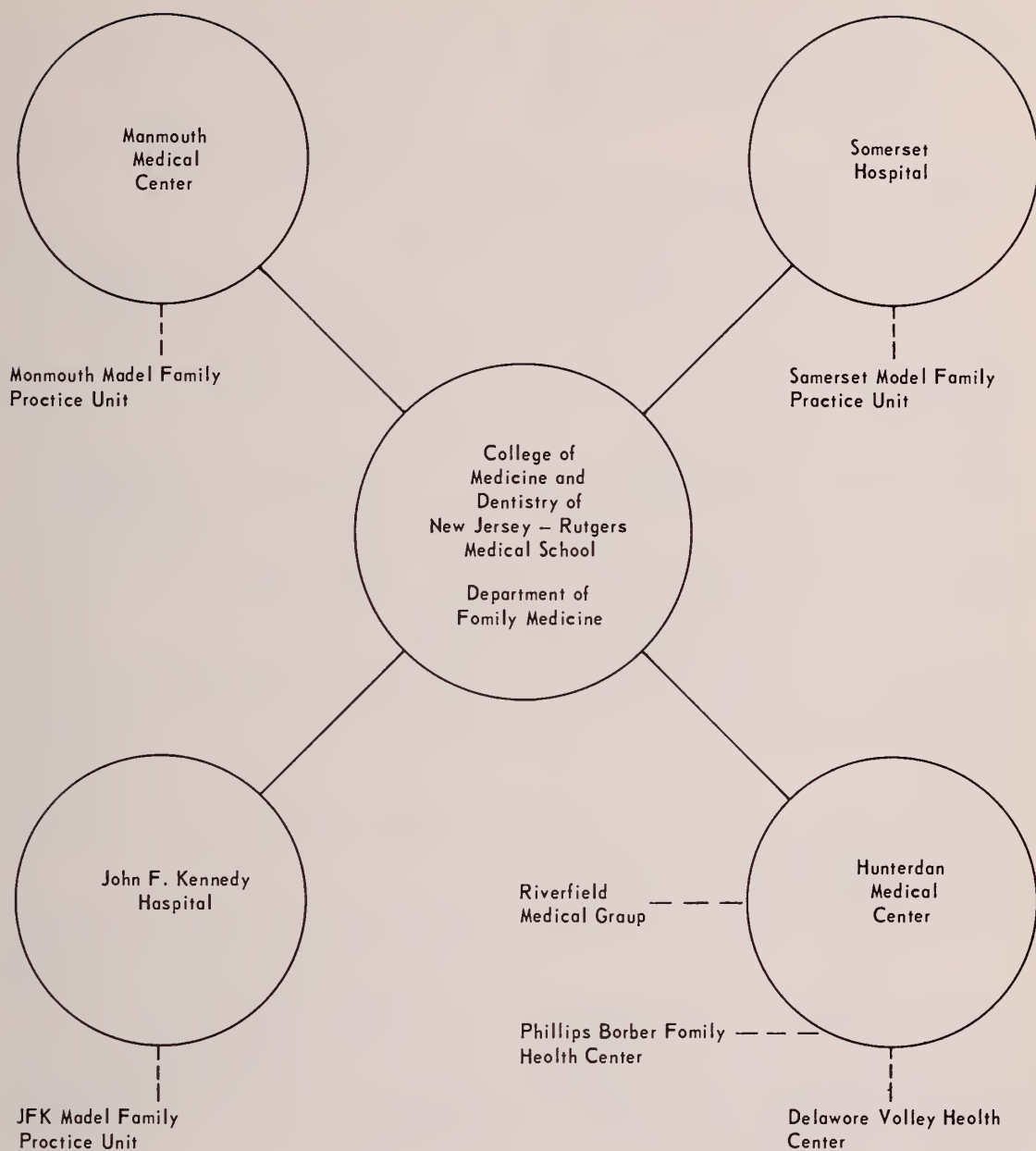
would become the high-quality family physicians they are seeking to become. The affiliated hospitals looked to the Department for assistance in developing a quality assurance program to accomplish these two goals.

This has proved to be a particularly difficult task to accomplish consistently throughout the programs due to the loosely coordinated network of hospitals which affiliate with the Department. With the support of a grant from the Robert Wood Johnson Foundation, the Department and community hospitals have developed a three-stage approach to quality assurance in which both residents and faculty will participate annually. The request for faculty participation in this project was based on two assumptions: (1) that the residents' professional growth will be facilitated best by guidance from superior clinical family practice role models, and (2) that the faculty, none of whom has been trained to teach his skills to others, will feel more comfortable with this task after: (a) acquiring an understanding of basic teaching methods, (b) having their clinical strengths identified, and (c) being given an opportunity to build upon their knowledge in those areas they wish to strengthen. During this program, which is intended to be self-sustaining three years after implementa-

[†]Baker RM, Gordon MJ: Competency-based objectives for the family physician. *Am Hosp Med Ed J* 7:2-16, 1974.

*From the Department of Family Medicine, Rutgers Medical School, CMDNJ, Piscataway, New Jersey, where Ms. Sadler is Adjunct Assistant Professor and Dr. Snope is Associate Professor and Chairman of the Department.

Table 1
Academic "Umbrella" of the College of Medicine and Dentistry
of New Jersey - Rutgers Medical School



tion, attention will be given to the residents' and faculty's clinical performances, factual knowledge, and psycho-social awareness, as well as faculty teaching skills.

Statements of the Hypotheses

1. The frequency with which the family practice residents address patients' psycho-social problems in clinical situations will increase

consistently during the three years of the training program, as determined by observation of clinical performance and chart audit.

2. The residents' medical knowledge will be shown to increase consistently over the three years of the program, as determined by observation of clinical performance, tests of factual knowledge, and chart audit.

Table 2

Hunterdon Medical Center's Family Practice Residency Program AMA Approved in 1962

Director: Dr. Peter Rizzolo—board certified family physician
Faculty: Three full-time board certified family physicians
 Three full-time board eligible family physicians
 34 part-time faculty from all other medical specialties

Residents: Potential capacity = 18

Six First Year

<i>Home States</i>	<i>Medical Schools</i>
(3) New Jersey	Cornell University CMDNJ—Newark CMDNJ—Rutgers
(2) Pennsylvania	Jefferson Medical School Temple University
(1) New York	Medical College of Ohio

Six Second Year

<i>Home States</i>	<i>Medical Schools</i>
(1) New Jersey	CMDNJ—Newark
(1) South Carolina	Duke University
(1) Ohio	Ohio State University
(1) South Dakota	Case Western Reserve
(2) Michigan	University of Michigan University of Rochester

Six Third Year

<i>Home States</i>	<i>Medical Schools</i>
(3) New Jersey	Jefferson Medical College Case Western Reserve CMDNJ—Newark
(1) New York	Georgetown University
(1) Massachusetts	University of Rochester
(1) Ohio	Penn State

Applicants for the Class of 1975 = 210
 1976 = 240

Teaching Sites

Inpatient

Hunterdon Medical Center—Total number of beds = 195

Ambulatory

Lambertville—Phillips-Barber Family Health Center
 Clinton—Riverfield Medical Group
 Milford—Delaware Valley Health Center

Table 3

Monmouth Medical Center's Family Practice AMA Approved in 1973

Director: Dr. John Allen—board certified pediatrician
Faculty: One half-time board certified family physician
 Seven part-time board certified family physicians
 Six part-time family physicians without certification
 Seven part-time board certified faculty from other specialty areas

Residents: Potential capacity = 18

Six First Year

<i>Home States</i>	<i>Medical Schools</i>
(4) New Jersey	Jefferson Medical College Hahnemann Medical College CMDNJ—Newark CMDNJ—Rutgers
(2) Pennsylvania	Hahnemann Medical College Medical College of Pennsylvania

Four Second Year

<i>Home States</i>	<i>Medical Schools</i>
(3) New Jersey	Philadelphia College of Osteopathic Medicine (2) CMDNJ—Rutgers
(1) Pennsylvania	Hahnemann Medical College

Applicants for the Class of 1975 = 50
 1976 = 150

Teaching Sites

Inpatient

Monmouth Medical Center—Total number of beds = 535
 Freehold Hospital—Total number of beds = 160

Outpatient

Monmouth Medical Center's Model Family Practice Unit

ject, as determined by feedback from the residents and program directors.

6. Residents and faculty will become accustomed to ongoing self-assessment, peer review, and the concept of continuing medical education to the degree that they will continue this procedure after completion of the program. If this is accurate, performance five years after completion of the program is expected to be at least equivalent with the skills of the third year residents in the program.

Methodology

In general, valid feedback about performance requires two basic components. The first is that well defined criteria exist which specify the individual's areas of responsibility and the level of competence which he is expected to achieve in each of these areas. The second is that attain-

3. The residents' clinical evaluations will indicate a steady improvement over the three years of the training program as assessed by external and internal evaluators through observation of clinical performance and performance with patient-management problems.

4. Overall performance of the faculty's medical care delivery, as assessed by observation of clinical performance and chart audit, will improve over the three years, and consequently their value as role models for the residents will increase.

5. The faculty's teaching skills will improve measurably during the three years of this pro-

Table 4

*Somerset Hospital's Family Practice Residency Program
AMA Approval 1974*

Director: Dr. Carl Meier—board certified family physician
Faculty: One salaried part-time board certified family physician
 Nine salaried part-time family practitioners
 One salaried part-time internist
 One part-time clinical psychologist
 55-60 attendings on the staff participating in the teaching of residents
Residents: Potential capacity = 18

Six First Year

<i>Home States</i>	<i>Medical Schools</i>
(2) New Jersey	Georgetown University
	CMDNJ—Newark
(3) New York	Georgetown University
	CMDNJ—Rutgers
	CMDNJ—Fifth Pathway
(1) Chicago	Northwestern Reserve

Two Second Year

<i>Home States</i>	<i>Medical Schools</i>
(1) New York	Dalhousie University
(1) Rhode Island	Des Moines School of Osteopathy

Two Third Year

<i>Home States</i>	<i>Medical Schools</i>
(1) Korea	National Medical College of Seoul
(1) India	Biroda

Applicants for the Class of 1975 = 37
 1976 = 45

Teaching Sites

Inpatient
 Somerset Hospital—total number of beds = 350
Outpatient
 Somerset Hospital's Model Family Practice Unit

Table 5

*John F. Kennedy Medical Center's Family Practice
Residency Program AMA Approved in March 1976*

Director: Dr. Samuel F. D'Ambola—board certified family physician
Faculty: Four part-time board certified family physicians
 One full-time board certified internist
 Two part-time specialists
Residents: Potential capacity—18

Teaching Sites

Inpatient
 John F. Kennedy Medical Center—Total number of beds = 415
Ambulatory
 Family Practice Model Unit now under construction on hospital grounds.

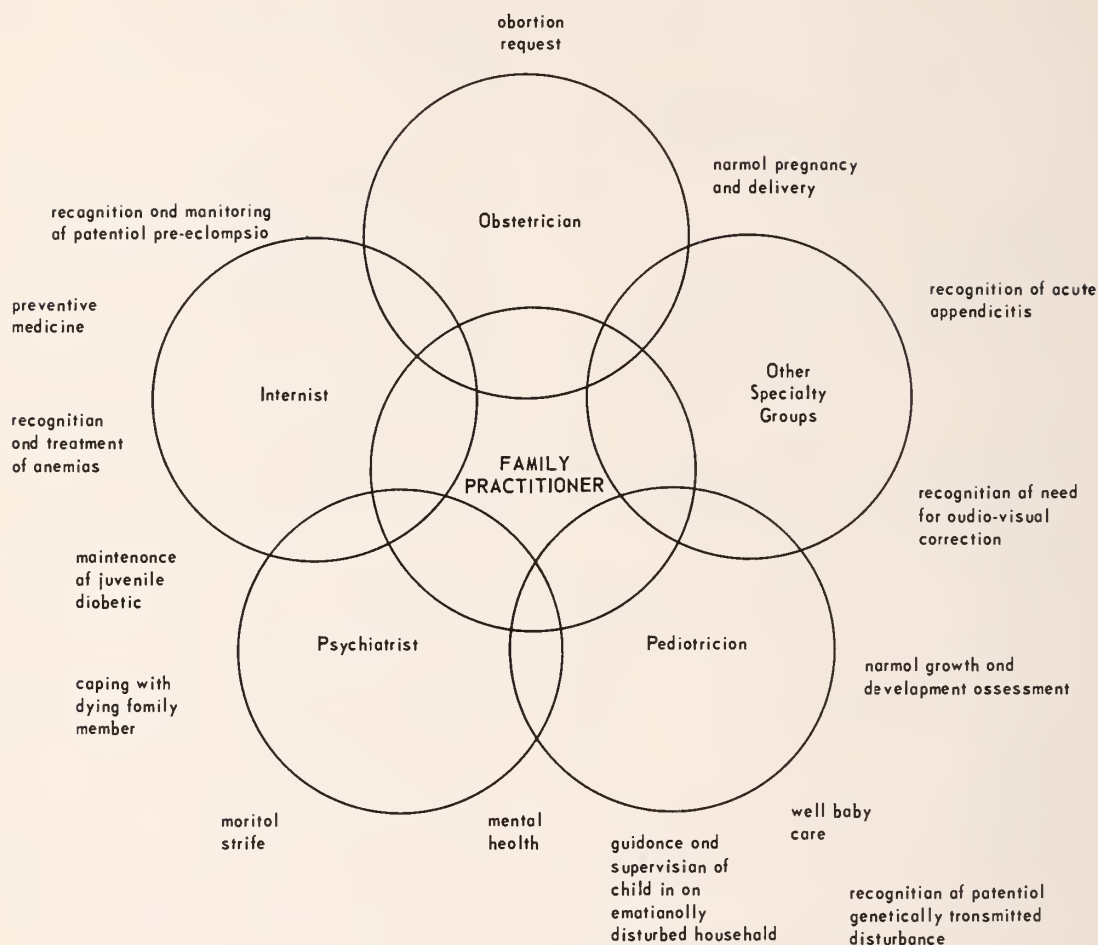
family medicine educators and physicians have not accepted formally a specific set of criteria to be achieved by aspiring family physicians, and of those criteria which are in use, none has been assessed to determine whether its mastery actually yields a medical care deliverer of high quality.

With no nationally accepted criteria upon which the quality assurance program could be based, an arbitrary decision was made to utilize and assess the "Competency-Based Objectives for Family Medicine" developed by Baker and Gordon[†] for the University of Washington's Family Practice Residency Program. These objectives define the knowledge, skills, and attitudes which Baker and Gordon considered to be appropriate characteristics of the adequate family physician. This seemed considerably more optimal than the complex process of developing original criteria or of resorting to the use of criteria which had been developed for other primary care physicians. Indeed, the latter option of using the criteria developed for internal medicine or pediatrics, for example, appeared to be completely inappropriate since these criteria were designed for physicians who would deliver care for a more narrowly defined area in depth, than for the broad range of medicine. Furthermore, it was not known whether achievement of these criteria actually would produce the end-product intended. However, the similarity of many of the tasks performed by these primary care physician groups makes it reasonable to compare their delivery of care in these overlapping areas since the academic training given to internists and pediatricians, at least, has the credibility accruing from long experience in producing physicians. It is expected then that in these areas of overlap the family physicians should be capable of delivering care which is equivalent to that delivered by other primary care physicians. This comparison might include the performance of a well-baby examination, a routine physical examination, or the counseling of an anxious patient (Table 6). Quality of care delivered by the participating family physicians in the areas of

ment of these criteria will result in an individual who fulfills the expectations of the desired end-product. In this instance, a family physician capable of delivering a high quality of care is the desired end-product. To date, however,

[†]Baker RM, Gordon MJ: Competency-based objectives for the family physician. *Am Hosp Med Ed J* 7:2-16, 1974.

Table 6
The Overlap Between Family Practice
and Other Physician Groups



This is meant to be a rough depiction of how family practice overlaps with other physician groups. The size of the circles has no quantitative meaning.

overlap then can be used as predictors of overall clinical mastery since it is not feasible economically to attempt to assess every facet of medical care delivery.

Using these competency-based objectives, Phase I will provide feedback about both the physician's clinical skills and cognitive medical knowledge. This will be accomplished initially through observing the interaction of both family physicians and internists with two simulated patients each of whom has been programmed to present one of the problems commonly seen in family practice. During these interactions, the

physician's interviewing skills will be monitored by three observers: a family physician, a clinical psychologist, and a medical social worker. These observers will provide the physicians with feedback on their interviewing techniques from the perspective of their individual disciplines. To avoid the tendency to draw global conclusions based on some incident or fact (such as the accuracy of the physicians' final diagnoses or their personalities) we also are developing a checklist which they will use to facilitate objective, consistent feedback of the physician-patient interaction and, coincidentally, allow us to determine the degree of inter-rater reliability.

ability. Post-consultation, the physicians will be asked to write a patient report on the usual chart forms exactly as they would following a routine patient interview. In this way, they will be able to receive feedback on both their clinical and record-keeping skills: how well they identify the patients' most salient problems from specific cues, how well they design a plan for patient management, and how much they are aware of the psychosocial elements of patient care. Later in the year a routine chart audit will be made on a condition presented by one of the simulated patients to see whether the feedback the physician received on his record-keeping skills helped him to improve the quality of his records.

At the conclusion of the interview with the simulated patients, the physicians who were observed will participate in an informal discussion period with both evaluators and simulated patients to gain further insight into their patient-interview behavior. Additionally, since the simulated patient interviews will have been videotaped, the physician will be able to play back the consultations and analyze them himself with the assistance of the written and verbal feedback received from the observers and simulated patients. In this review of his videotape, he will receive support from the medical social worker who observed the interview and who will be responsible for assisting the physician to strengthen his interview behavior throughout the year. Other instruments which will be used to provide feedback in Phase I will include patient management problems and paper and pencil tests of basic factual knowledge. As a cross-check on whether the quality assurance program is helping the physician to assess what it is intended to assess, we will compare the program's diagnostic feedback of each resident's clinical performance with that which the faculty derives based upon their day-to-day observations to determine whether there is any correlation between the two and, if so, the degree of the correlation.

When using formal testing devices of this type, to provide constructive feedback, a major limitation must be recognized. That is, performance on such tests is only predictive of performance in similar test situations. There is no available

test of medical knowledge or clinical performance which has been shown to have predictive validity for clinical competency outside of the test situation. The best one can do is to make the testing device approximate as closely as possible the normal clinical situations. This helps to close the gap between the test situation and actual clinical performance allowing one to take a "leap of faith" in predicting performance outside of the testing milieu.

As a result, in the absence of predictive validity, there is considerable debate regarding how the quality assurance program's feedback on physician performance should be used. Is it legitimate ground for requesting a resident or faculty member to leave a program or revoking his privileges or certification if he does not achieve a satisfactory level of performance? Or should these tests be used purely to facilitate the residents' and faculty's attainment of mastery without punitive connotations? Educational authorities acknowledge that these testing devices cannot be used to predict performance outside of the test situation, and at best can be used for making an "educated guess" about a physician's future performance. Perhaps then it is inappropriate to release the results to individuals who are in a position to make a summative judgment about the physician's professional competence, since it would be unrealistic to hope that his opinions of the physician would not be influenced by such data. To accomplish this would mandate that feedback would not be given to supervising faculty members, but would be entirely one-to-one, making individuals responsible for seeking assistance in upgrading their skills. While this latter situation would prohibit the faculty from making their teaching more individualized, it would better prepare the physician for his professional self-direction once he has stopped participating in this quality assurance program. We feel that it is important to settle this issue prior to embarking upon such a program, since it is unlikely that residents and faculty will participate readily until they know how the data will be used.

The Department and its affiliated programs are still grappling with this issue. It now appears that we will take a middle-of-the-road stand.

Those individuals in a position of authority will be informed thoroughly of the limitations of the collected information and encouraged to use it primarily for diagnostic feedback of strengths and weaknesses of the residents and faculty and for preparing individualized programs aimed at strengthening clinical skills. However, if the performance still does not improve even with this help, and other independent assessments of the physician by the individual hospital's faculty substantiate that he is not performing at the desired level, this test performance data may be used as documented evidence of unsatisfactory achievement at the program director's discretion. Should this situation arise, it at least assures the Program's Family Practice residents and faculty of an impartial, external review of performance.

Phase II will include a cumulative diagnostic feedback to residents and faculty of their identified strengths and weaknesses in each of the areas reviewed. This will, of necessity, be a crude diagnosis. For example, after Phase I is completed, a physician might be told that his skills at terminating patient consultations are not yet at the level of mastery desired. While this information is of value diagnostically, it does not show the physician the specific problem which is preventing his mastery of this skill or how he can achieve mastery.

Following the cumulative diagnostic feedback, Phase II will be concerned with helping the physician further to refine the factors preventing mastery. Review of videotapes of his routine consultations, discussions with hospital faculty and medical school consultants, as well as appropriate reading material, may point up, for example, the physician's anxiety that his patient will feel rejected by termination, or his fear that he has failed to discover some fact crucial to developing an accurate diagnosis, or he may simply not ever have learned the techniques of interview termination and how to apply them.

Once the physicians have been helped to define their weak areas more accurately and narrowly, Phase III will focus on the development of individual and group programs designed to help the physicians strengthen their skills.

Additionally, conferences about new developments in medicine will be offered to aid the faculty and residents in keeping their knowledge and skills up to date and an education committee will be convened in each community hospital to coordinate curriculum revision. This three-stage approach to quality assurance will be recycled each year to determine whether the identification of educational needs and educational programs have helped the physicians to add to their baseline clinical skills.

Finally, it is important to have some objective, quantifiable measure of change as a consequence of the Quality Assurance Program and to be able to compare the impact of the program on each of the community hospital residency programs. To this end, the content of all the simulated patient interviews will be transcribed to enable a content analysis to be made from one or more perspectives when we begin directly to assess the Quality Assurance Program itself. For example, we might choose to look at the format of the interview, the clinical efficiency of the physicians' questions, or the amount of preventive physician intervention, and note the changes over time.

Outcomes

The outcomes anticipated from this Program include: 1) an overview of the professional growth which occurs during the three years of the residency program, 2) a critical assessment of the competency-based objectives as a framework for a family practice residency program, 3) the production of program graduates and faculty who are known to have attained mastery level proficiency in the skills and attitudes essential to the competent delivery of family medicine, 4) the development of family physicians who have come to see self-evaluation and peer review as a desirable, familiar, and comfortable experience, and 5) the establishment of a working model for upgrading the teaching competence of clinical faculty and instilling an interest in teaching among residents.

Additionally, we plan to assess whether or not the residents participating in this Quality Assurance Program are representative of the population of all medical school graduates. To

accomplish this we will compare how they performed on Part II of the National Board examination. If the Quality Assurance Program's participants prove to be representative, we would have some indication that the detailed observations made among them could be expected to be seen among other medical school graduates. If they are not representative, this could help to explain unanticipated findings and would certainly limit any generalizations of the conclusions beyond the immediate participant group.

Finally, it must be recognized that the scope of the family physician's responsibilities is generally determined for him by the needs of his patient population. This Quality Assurance Program is expected to produce family physicians who are willing and able to seek methods of objectively assessing the adequacy of their formal training in view of their patients' needs and are comfortable with the process of upgrading their professional skills, rather than "making do" or ignoring the possibility that they might not be sufficiently skilled in some areas.

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P.O. Box 101, Piscataway

Dr. Petryshyn Named Chairman of Deafness Research Foundation

Walter A. Petryshyn, M.D., of Upper Montclair, has been elected Chairman of the Board of Directors and the chief executive officer of The Deafness Research Foundation, the only national voluntary health organization devoted to furthering research into the causes, treat-

ment, and prevention of hearing impairment and other ear disorders. Dr. Petryshyn is clinical professor of surgery (otolaryngology) at the New Jersey Medical School, CMDNJ, in Newark and director of otolaryngology at the Mountainside Hospital in Montclair.

If your angina patient* isn't having 3 out of 4 better days than usual... try Cardilate® (ERYTHRITYL TETRANITRATE)

*Please note: unstable angina patients may be refractory to all long-acting nitrates

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1. Russek HJ: AM J M Sc 239:478, 1960



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Rapid-acting chewable tablets (10mg) preferred by many patients. Should be given before anticipated periods of stress to produce an action within 5 minutes and lasting up to 2 hours. Sublingual tablets also available.



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Medical Necessity and PSRO *

Government programs are willing to pay reasonable fees for professional services that are "medically necessary." The PSRO program is structured to provide peer review in terms of "medical necessity." But what is "medical necessity?"

Humanity has survived for thousands of years—through pandemics and other major catastrophes—without the benefits of "modern medicine" with all of its antibiotics, immunizations, and sophisticated diagnostic and treatment techniques. For the most part, these have been available for less than twenty-five of the many years of human existence.

In New Jersey we are painfully aware of the problems that can be created by the use of some of these techniques: the patient whose entire existence is vegetative in nature; the cardiac who begs not to be defibrillated any more; the patient who commits suicide rather than endure more renal dialysis. These are difficult philosophical and legal problems, whose solutions are elusive due to the hostile and confusing environment which has resulted from increased use of the courts and the press by the public to redress real or fancied injury.

Generally, society desires to be maintained in a healthy state and free of disease. Society also expects that injuries will be treated in such a way as to restore the function of the injured parts and the body as a whole to its pre-morbid condition, regardless of the seriousness of the injury, with a minimum amount of treatment and expense.

"Medical necessity" appears to have a somewhat different meaning to the public than to the profession charged with delivery of medical care. Obviously, part of this public definition is not only unrealistic but absolutely unattainable. It is not possible to reverse the aging process. It is not possible to restore damaged organs or bones to a previous uninjured state. It is not possible to produce miracles.

In part, the medical profession is the victim of its own hard-won successes. The effects of antibiotics on the common infectious diseases do border on the miraculous in some ways. The elimination of such viral diseases as poliomyelitis, which removed an ever-present parental fear, has to be regarded as nothing short of amazing. The success of kidney transplantation is astounding to the medical profession as well as to the lay community. Reflection on such triumphs over disease explains why the public expects so much of medical care. Couple this with the influence of the sensational press on the unsophisticated reader and it is little wonder that medical miracles are expected every time a physician treats a patient, regardless of his age, general state of health, or the seriousness of an injury.

The situation has remained unchallenged because no responsible medical authority has addressed itself effectively to the question of what constitutes "medically necessary" treatment.

Consider, for example, the woman with five children who insisted on a tubal ligation after her last child was born and who was readmitted to the hospital two years and one husband later, as a sterility problem. Should a 92-year-old man with kidney failure be admitted to a chronic renal dialysis program? What about the patient with irreversible brain damage who persisted in a vegetative state for several months in an intensive care unit on a respirator?

The first case is almost certainly an example of medical economics at its worst. The second is probably a reflection of an overzealous interest in a new technique, combined with the philosophical question of when to withhold a particular treatment modality. The final example is illustrative of many of the legal, religious, and philosophical problems the profession faces: What is death? What is life? When is a medical situation hopeless? What are the obligations of

*Personal commentary of William A. Dwyer, Jr., Medical Director of the Passaic Valley Professional Standards Review Organization (PSRO).

a physician in such a hopeless situation? What rights are exclusively the patient's and what obligations belong to the relatives and the physician?

No individual physician can possibly answer all aspects of medical necessity. Indeed, the profession as a whole may find it difficult to come up with answers if the question is attacked as a whole. Taken piecemeal, however, the development and refinement of criteria for the treatment of disease and injury states will shed some light on the basic question of medical necessity. At that point in time, philosophers and legal

experts may provide meaningful answers to the non-medical aspects of the dilemma.

Fortunately, the mechanism for implementing this approach already exists and the control of its machinery lies securely in the hands of the medical profession through the PSRO Program. Working within its outlines, we can pinpoint medical necessity quite accurately. The medical profession is the only group that should take this responsibility. It should not be left for others to do. The means are at hand and the time is now, so let's get to it!

William A. Dwyer, Jr., M.D.

INFORMATION FOR READERS AND CONTRIBUTORS

The Journal, the official organ of The Medical Society of New Jersey, is published monthly under the direction of the Committee on Publication. *The Journal* is released the first week of the month, and a copy is sent to each member of the Society.

Change of Address: Notice of change of address should be sent promptly to The Medical Society of New Jersey, P.O. Box 904, Trenton, New Jersey 08605.

Communications: Members are invited to submit to *The Journal* any suggestions for the welfare of the Society, as well as comments or criticisms of material in *The Journal*. All such communications should be directed to the Editorial Office of *The Journal*. The Publication Committee reserves the right to publish, reject, edit, or abbreviate all communications submitted.

Contributions: Manuscripts (original and one copy) submitted to *The Journal* must be typewritten, double-spaced on letter size (about 8½ x 11 inch) paper, and forwarded to the

Editorial Office at the address below. The Publication Committee expressly reserves the right to reject any contributions, whether solicited or not, and the right to abbreviate or edit such contributions in conformity with the needs and requirements of *The Journal*. Galley-proofs of manuscripts will be submitted to authors for correction of typographical errors. Rewriting or reinsertion of material changed or deleted by the editor is not permitted. Every care will be taken with the submitted material, but *The Journal* will not hold itself responsible for loss or damage to manuscripts. It is understood that material is submitted here for exclusive publication in this *Journal*.

Illustrations: Authors wishing illustrations for their articles will submit glossy prints or original drawings.

Bibliography: Format used in JAMA must be followed. References should be numbered in order of citation in the text.

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THE JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY

P.O. Box 904, Trenton, New Jersey 08605

NEW JERSEY DOCTORS' NOTEBOOK

Report on Special Session MSNJ House of Delegates

December 1, 1976

At a Special Session on December 1, 1976, the House of Delegates, MSNJ, voted to approve the organization of the Medical Inter-Insurance Exchange of New Jersey, a physician-owned carrier developed by The Medical Society of New Jersey with the assistance and cooperation of The New Jersey Association of Osteopathic Physicians and Surgeons.

The purpose of the Exchange is to offer non-assessable professional liability insurance on an occurrence basis to all allopathic and osteopathic physicians licensed to practice in the State of New Jersey who maintain at least 75 percent of their practice within the State. The decision to form a physician-owned carrier was precipitated by the action of Chubb and Son, Inc., and its subsidiary, The Federal Insurance Company, to withdraw from the professional liability program on February 1, 1977, unless the recently enacted Reinsurance authority was activated by the State of New Jersey. That activation would allow the carrier to cede any amount of its risk to a Reinsurance Association comprised of all casualty insurance carriers selling insurance in New Jersey, while retaining the administration of the plan. The Reinsurance Authority is quite similar to the Joint Underwriting Associations implemented in several states.

The Medical Society of New Jersey did a thorough analysis of the statute which authorized the Reinsurance Authority, and found many things they considered detrimental to physicians' interests. The analysis showed that:

(1) Physicians would have little influence on the policy decisions and operation of the Reinsurance Authority as there is no provision for physician membership on the governing body.

(2) If the experience of the Reinsurance Authority follows that of Joint Underwriting Associations operative in other states, the Reinsurance Authority probably would require higher premiums than an insured plan.

(3) All excess losses would be assessable against all of New Jersey's physicians.

(4) The Reinsurance Authority would inject government more deeply into the affairs of allopathic and osteopathic medicine.

(5) No guarantee has been made that physicians would not be charged a surplus contribution. The statute provides for charges in addition to the normal premium for the establishment of an Authority Recovery Fund.

Considering these conclusions, The Medical Society of New Jersey sought other alternatives. It quickly was apparent that other insurance carriers were not willing to assume the program. Consequently, it was felt that formation of a physician-owned carrier was the best vehicle for protecting the physicians' interests.

A physician-owned company offers the following advantages:

(1) All underwriting and investment profits, if any, will accrue to the policyholders and their company.

(2) The company will operate at considerably reduced overhead expense, allowing a greater percentage of the premium to be allocated to claims.

(3) Management of the company should reflect more directly its policyholders' interests.

(4) It is the intention to offer only non-assessable policies; that is physicians will not be subject to retrospective assessment in the event of adverse claims' experience.

(5) Availability of coverage through a non-governmental mechanism will be continued.

The Medical Inter-Insurance Exchange of New Jersey will be the physicians' company and will be managed according to sound business and insurance practices.

As professional liability insurance for New Jersey physicians is the Exchange's only business, be assured that this program will receive the professional attention it deserves.

Trustees' Minutes

November 21, 1976

A regular meeting of the Board of Trustees was held on Sunday, November 21, 1976, at the Executive Offices, Trenton. Detailed minutes are on file with the secretary of your county medical society. A summary of significant actions follows:

Legislation . . . Approved the positions recommended by the Council on Legislation on the following bills, except as noted under *A-1973* and *A-2054*:

S-1472 — Mental Health Treatment—This bill is one of an impending package of four, which are to be evolved as a result of a special committee study. It deals with assurance that confined patients receive care and treatment rather than mere custody. It would create within Institutions and Agencies:

(1) A Mental Treatment Standards Committee of nine members, two of whom would be certified psychiatrists. The other seven could be non-physicians. The Committee shall prepare a "Manual of Adequate Standards for Treatment of the Mentally Ill in State and County Mental Institutions," which will include, but not be limited to, definitive minimum treatments. (Cookbook medicine without the cook controlling the formula.)

(2) A Patient Treatment Review Board—two of five members would be M.D.s. The Board would receive, hear, and investigate complaints from patients concerning inadequate treatment and would recommend to the Commissioner of Institutions and Agencies action to compel adequate treatment.

This bill is far-reaching and could have a devastating impact. *DISAPPROVED*, because although the concept of "assuring that confined patients receive care and treatment (rather than) mere custody" is laudable, the proposed membership of the Mental Treatment Standards Committee does not insure sufficient psychiatric participation to accomplish the proposed objective. Further, the Quality Assurance Programs of the Joint Commission on Accreditation of Psychiatric Facilities and the PSRO's may be expected to solve the problem.

S-1512 — Professional Boards—This bill provides for one public member for every five regular members on the licensing boards. (Would eliminate the public and executive department members whose appointment currently is provided for in P.L. 1971, c. 60, C.45:1-2.2) The State Board of Medical Examiners would be reduced to 13 M.D.'s, 1 D.O., 1 chiropractor, 1 podiatrist, 1 bio-analytical laboratory director, plus the 2 public members. *APPROVED*

S-1540 — Cancer Research—Provides for a 1¢ per package tax on cigarettes. Money to be disbursed by the Commissioner of Health to Institutes operated by the College of Medicine and Dentistry of New Jersey and Rutgers University and others. *APPROVED*

S-1595 — Payment of Defense Costs and Attorney's Fees for Frivolous Suits Against Certain Professionals—This bill does not directly affect the medical profession. However, it would permit architects, engineers, contractors, and land surveyors who are named improperly in suits to recover the costs of defense when the Court, upon motion, finds the action to be "frivolous or vexatious." (With a subtle amendment to include physicians, a significant step forward could be made to temper the rate of claim assertion in medical professional liability actions.) *CONDITIONAL APPROVAL*; if the bill is amended to include physicians change to *ACTIVE SUPPORT*

S-1674 — Menza, et al.—Mental Health—Creates within Institutions and Agencies a Division of Mental Health Legal Counseling and Assistance. The substantive action of the bill goes beyond that title, however, since Division personnel will become involved in rendering advice to patients in any matter related to diagnosis, treatment, and care including consents, denials, facility transfers, and so on. *ACTION DEFERRED*, pending further information from the Council on Mental Health.

S-1675 — Menza, et al.—Competency to Stand Trial—This bill is designed to produce a format detailing when an individual is competent to stand criminal trial. Along with its companion bill *S-1676*, which addresses the issue of culpability, it produces a drastic departure from existing case law and would recognize the theoretical defense of "irresistible impulse." A major difficulty is that both bills equate the psychiatrist and the psychologist and would restrict participation

as "experts" to those disciplines. *ACTION DEFERRED*, pending further information from the Council on Mental Health.

S-1676 — Menza, et al.—Criminal Responsibility (See *S-1675* for description) *ACTION DEFERRED*, pending further information from the Council on Mental Health.

S-1677 — Menza, et al.—Involuntary Civil Commitment — The final component of a four-bill package, this proposal again equates psychiatrists and psychologists and excludes all other medical and surgical disciplines. Another glaring defect is that mental disorders produced by a primary disease process such as alcohol or drug dependence are not considered grounds for an involuntary commitment proceeding under this bill. *ACTION DEFERRED*, pending further information from the Council on Mental Health.

S-1679 — McGahn—Optometric Referrals to Ophthalmologists—This bill redefines optometry to require the optometrists to refer certain patients for ophthalmological studies. A major defect in this bill is that in any one of the six listed occasions a physician other than an ophthalmologist might, indeed, be a more proper referral. *CONDITIONAL APPROVAL*, subject to submitted amendments to the bill.

A-1953 — Transportation of Radioactive Materials — Amends Title 26 to prohibit the transportation of radioactive materials without the prior approval of the Commissioner of Environmental Protection. Threshold limits are:

- (a) Plutonium isotopes exceeding 2 grams or 20 curies;
- (b) U-235 exceeding 25 atomic percent of the total uranium content where the U-235 content exceeds one kilogram;
- (c) Any actinides exceeding 20 curies;
- (d) Mixed fission, waste products; spent fuel elements exceeding 20 curies; and
- (e) Any quantity of radioactive material defined as a "Large Quantity" in 10 CFR Part 71. *ACTION DEFERRED*, pending a final report from the Radiological Society.

A-1973 — Living Will — Provides that persons over 18 may execute legal documents directing that in the event of a terminal illness no maintenance medical treatment may be utilized to prolong life. "Terminal illness" is certified to in writing by the attending physician. Physicians certifying terminal illness or relying upon the instruction of the executed document are immune from civil or criminal liability if acting in good faith. *APPROVED* with recommendation to the sponsor that the word "life" be changed to "dying".

Note: Board amended Council's recommendation on *A-1973* to *NO ACTION*.

A-1999 — Blue Shield Coverage of Alcoholism — Requires MSP to offer group contractees optional riders for coverage of alcoholism treatment. *APPROVED*

A-2001 — Blue Cross Coverage of Alcoholism — Requires HSP to offer group contractees optional riders for coverage of alcoholism treatment. *APPROVED*

A-2021 — Generic Substitution and Advertising of Prescription Drugs — Allows for the generic substitution of prescribed items where the physician fails to indicate "do not substitute." The physician would be at all times in control of the prescription process. Also amends current law prohibiting the advertising of drug products. *APPROVED*

A-2032 — Physician-Dentist Loan Redemption Plan — Makes available to CMDNJ students a loan redemption formula for service in areas of the State designated by the Department of Health as underserved. 1 yr. = 30%, 2 yr. = 30%, 3 yr. = 25%; 85% is the total write off permitted. *ACTION DEFERRED*, pending amendments now being made to this bill.

A-2054 — Radiologic Technologists — Outside of a change in terminology from technician to "technologist" the significant changes in current law are: (1) Restricts training programs to the hospital setting; (2) Eliminates the issuance of limited certificates for chest radiography. *CONDITIONAL APPROVAL*, with recommended changes in the wording of the bill to be submitted by the Radiological Society.

Note: Board amended Council's recommendation on *A-2054* to *ACTION DEFERRED*, pending changes in the wording of the bill to be submitted by the New Jersey Radiological Society.

A-2058 — Jersey City Medical Center — Appropriates \$4 million for the support of the Jersey City Medical Center. *APPROVED*

A-2107 — New Jersey Dental Practice Act — Amends the existing Dental Practices Act. A major problem area is paragraph 15 which allows dentists to conduct physical evaluations of "the patient in connection with dental treatment, and may sign a death certificate when death has occurred in connection with dental practice." *NO ACTION* if amendment is effected; *DISAPPROVAL* if amendment is not effected.

AMENDMENT — Delete that portion of the bill referring to the dentist signing a death certificate.

A-2110 — Department of Health, Division of Consumer Health Services — Legislates a Division which exists under current law by action of the Commissioner. Transfers all inspection authority *vis-a-vis* sanitary conditions of government facilities to the Division. Other changes related to due process in inspecting retail food establishments are also included. *APPROVED*

A-2204 — This bill grants immunity from liability to public entities, public employees, and volunteer personnel (including physicians) participating in the A/New Jersey/76 Immunization Program. *APPROVED*

"Impaired Physician" Legislation . . . Empowered the President to appoint an Ad Hoc Committee to make recommendations for the establishment of a program directed toward assisting the impaired physician. (Such committee is to include in its membership individuals who have "made the return journey.")

Publication Committee . . . Approved the following recommendations from the Committee on Publication:

That the Medical Society of New Jersey contract for the production of *The Journal*, MSNJ, with Hughes Corporation and Trentypo, Inc.

That the display advertising rates for *The Journal*, MSNJ, be adjusted, effective January 1977, on the basis of a one-page, twelve-times rate of \$220. New rates would be as follows:

	1 time	3 times	6 times	12 times
1 page	\$260	\$250	\$240	\$220
1/2 page	150	140	130	120
1/4 page	70	65	60	55
1/8 page	50	45	40	35

(Prices listed are per insertion)

Standard Color Rate—\$120 Four-Color Rate—\$440
(Color rates are in addition to earned black/white rate)

Conference on Continuing Medical Education . . . Receives as informative a report from Dr. Alfred A. Alessi on the AMA Conference on Continuing Medical Education, held October 5 to 7, 1976 in Chicago. It was noted that New Jersey has received national recognition in the field of continuing medical education and Drs. Arthur Bernstein and James A. Rogers were commended for their efforts in this area.

Committee on Medicaid . . . Approved the following recommendations from the October 27th meeting of the Committee on Medicaid:

- (1) That the consultation report be placed in a sealed envelope when sent to the Medicaid central office, to be read only by physicians.
- (2) That psychiatric consultation reports be reviewed only by psychiatrists.
- (3) That there be a time limit on reviewing consultation reports, and a time set by Medicaid when the reports will be destroyed.

Committee on Audit Review . . . Approved the following recommendations from the Novem-

ber 4th meeting of the Special Committee on Audit Review:

- (1) That the Business and Financial Manager be authorized to communicate with Mrs. A. Reasoner Sayre concerning a mutually satisfactory royalty settlement on *The Healing Art*, as covered in her contract.
- (2) That the Committee on Finance and Budget be directed to credit all accrued interest earned on the mandatory professional liability assessment to that account.

Annual Meeting . . . Directed the Committee on Annual Meeting to develop a firm policy on the management of the inaugural reception and dinner. (It was suggested that the inaugural reception remain open to all, as in the past, with MSNJ picking up the deficit.)

Medicaid Public Relations . . . Directed that a meeting between the Executive Committee and representatives from the Special Committee on Medicaid be scheduled to discuss that Committee's activities, function, and expenditures, and report to the Board.

Public Relations Advertising Firm . . . Approved a recommendation from the Council on Public Relations that the following anticipated program proposed by Paolin and Sweeney (PR advertising firm) be approved:

- (1) Posters and newspaper ads depicting medical practices and procedures of 100 years ago.
- (2) As a follow-up, put together a concept and specifics of the various specialties.
- (3) Continue producing a television commercial once a month or every two months if the present one is successful.
- (4) Continue with newspaper advertisements but intersperse with distribution in news magazines (New Jersey only).

. . . Directed that \$185,600 be allotted for the public relations programs; \$100,000 from the professional liability fund to be used solely for professional liability (physician-patient education); \$85,600 from the public relations budget for the Medicaid and general public relations programs.

Public Relations Continuing Projects . . . Approved the following continuing public relations projects for 1976-1977:

(a) Publication and distribution of the *Membership Newsletter*, and a *Periodic Newsletter* to cooperating agencies/individuals, as required.

(b) Preparation and publication of special news releases as required in furtherance of the Society's activities, including the eye health screening program, the annual meeting, child safety week, and selected official programs.

(c) Bestowal of Golden Merit Award.

(d) Press releases and information center at annual meeting.

(e) Orientation programs for new members under sponsorship of component societies.

(f) Encouragement of statewide emergency medical care coverage.

(g) Voluntary blood donations.

(h) Radio broadcasts under auspices of component medical societies.

(j) Medical TV programs.

(k) Diabetes Detection Month.

(l) Placement Service.

New Jersey Hospital Association . . . Received as informative the following report of the October 13th meeting of the New Jersey Hospital Association from MSNJ liaison representative, Dr. Rudolph C. Gering:

Action was taken to support a number of legislative bills, including:

A-2043 which reviews and abolishes agencies whose function has terminated.

ACR-120 which creates a commission to evaluate the effectiveness of the "Health Care Facilities Planning Act" and to evaluate the Department of Health's progress in its implementation.

Action was taken to oppose actively a number of legislative bills, including:

A-2110 which would establish a Division of Consumer Health Services in the state Department of Health. It was felt that the health department should not be expanded further.

S-536 which would require that employers carry the proof burden in unemployment claims.

S-831 which adds additional categories to those who may practice medicine and surgery in the state, as physician's assistants, under approval of job description accepted by the Board of Medical Examiners.

Supported were:

A-2069 for counties to provide funds for treatment and diagnosis of children with Tay-Sachs disease.

A-2117 providing for licensing of respiratory therapists and technicians.

S-265 providing for hearing testing in newborns.

S-1529 requiring two public members on Boards of Medical Examiners and Pharmacy.

Formed special task force committees to study all aspects of the new proposed regionalization criteria.

Took note of the strike by nursing personnel at Englewood Hospital and the difficulties encountered. Also noted that Kessler Hospital was fined for inadequate physician coverage, hired additional licensed house officers, but then had their salaries denied as part of rate-base expenses.

Non-Physician Administrators of State Psychiatric Hospitals . . . Noted that Governor Byrne has indicated that the decision to place non-physicians in the posts of administrators of state psychiatric hospitals was made by the Department of Institutions and Agencies in 1975 and he could see no reason not to support the action.

Note: MSNJ has made its position known to the Governor—that MSNJ believes that psychiatric patients and the management of psychiatric hospitals present unique problems which only can be appreciated and addressed by chief executive officers who are board certified in psychiatry.

Revision of S-1242 . . . Approved a further revised version of S-1242 (Society-sponsored "Patient's Bill of Rights"), agreed upon verbally at a meeting with Senator Garramone.

Note: The remainder of the Society-sponsored bills have been amended to make their enactment contingent upon S-1242 being signed into law. President Madara agreed to respond to a communication from the Academy of Family Practice expressing that Society's opposition to S-1242.

CAT Scanners . . . Received as informative a communication from the Department of Health stating that the proposed regulation on computerized axial tomography scanners has been cleared by the State Health Planning Council and published for initial comment by the Health Care Administration Board. It was suggested that the Health Systems Agencies use the proposed regulations as a planning criteria in the interim so that HSA's could proceed with the processing of the certificate-of-need applications.

Procedural Guidelines for Health Facilities Dealing with Comatose Patients . . . Requested that the Executive Committee review the proposed procedural guidelines for health facilities dealing with comatose patients, which resulted from discussions with representatives of the New Jersey Association of Osteopathic Physicians and Surgeons, the State Board of Medical Examiners, the New Jersey Hospital Association, the Attorney General's Office, the Department of Health, and MSNJ, and if acceptable so notify the Department of Health.

CMDNJ Notes

Stanley S. Bergen, Jr., M.D.
President, CMDNJ

It gives me great pleasure to introduce a new member of the faculty of the College of Medicine and Dentistry of New Jersey with a somewhat different mission. He is Russell L. McIntyre, Th.D., theologian and ethicist. His assignment is to organize, direct, and expose our students to programs in the health-care humanities, which includes ethics, sociology, religion, philosophy, and law. It is an area of growing interest to medical schools.

Dr. McIntyre, whose work is being assisted by a grant from the Foundation of CMDNJ, is a graduate of Wagner College, Staten Island, New York, and of Lutheran Theological Seminary, Philadelphia. He studied ethics and theology at Wittenberg University, Springfield, Ohio, and took his doctorate at the Graduate School of Theology of the University of Toronto. He has occupied a pulpit, was a fellow in medical ethics at the Harvard Medical School and, for six years before coming to CMDNJ, was assistant professor of religion at the Catholic University of America. Among other societies, he is a member of the Institute of Society, Ethics, and the Life Sciences, and he has written *The American Ethic: The Moral Foundations of American Society*.

I have asked Dr. McIntyre to discuss his work in the health-care humanities at CMDNJ. Following is the first part of his two-part report.

CMDNJ-Programs in the Health Care Humanities

Since the publication of the Flexner Report in 1910, traditional medical education in the United States has been extremely attentive to advances in scientific knowledge. Before the cause of infectious diseases was known, the practice of medicine was extremely imprecise. With the discovery of antibiotics and insulin, the techniques of surgical excision, radiation, and chemotherapy, medicine was launched into new and uncharted waters. With these advances came enormous benefits. Science and medicine combined to revolutionize man's notions of his own power over life and, perhaps, even death—certainly of his power over the level of suffering between those linear points. And with technologic sophistication came enormous responsibilities. But technology proved not to be redemptive, only progressive. The perennial dilemmas of life, death, and suffering were not answered, but only projected against a panoply of greater variables, each as confounding and illusory as the philosophical answers of Ancient Greece.

The Flexner era in medical education concentrated energies on the attainment of the latest scientific fact about disease entities and the most sophisticated diagnostic technique. The age of specialization and subspecialization has at times tended to produce health care professionals who practice technically competent medicine but who may not be cognizant of the continuing need for compassion for patients. The Flexner era succeeded in placing medicine on a firm scientific base, but it often allowed for humanistic considerations of patient care to be sublimated. This is in no way a criticism of those who practiced medicine; rather it is the recognition of an historical fact.

There is considerable evidence today that we are at the threshold of a new era in health care and medical education. The Flexner era has served us well, in that it gave us an insight into the causes of the problems that beset human misery. It has helped us to understand better our human condition and our capacity to effect change in our physical environment. Today there is no desire to move from our scientific heritage,

only to supplement it with an attempt to understand the meaning of our life *vis-a-vis* the technologies we employ to sustain it.

Every decision in medicine involves the prioritizing of human values. From the simplest decision (e.g., to accept a person as a patient) to the most complex issue (e.g., judgments as to acceptable quality of life levels), the practice of medicine begins and ends with value assumptions. And every physician, dentist, nurse, allied health person—indeed, every individual (including patients)—has a value system which enables him or her to make decisions. Although traditional medical education presented the latest scientific discovery, it did not allow for an examination and discussion of the personal and social values, both explicit and implicit, in the application of that discovery.

Medical technologies can be categorized in two ways: “High technologies” or those complete in and of themselves (e.g., polio vaccine or penicillin in the treatment of specific diseases, such as syphilitic heart disease), and “half technologies,” or those which treat the end-stage of a disease, or a disease which has run its course, while not able to correct for the cause of the disease itself (e.g., dialysis, a coronary by-pass, or a respirator).

Many of the ethical dilemmas in medicine come from the half-technologies. How should they be used in a morally responsible manner? By what criteria should it be decided who gets scarce medical resources? When it is unclear whether we are prolonging life or only postponing

death, and how much is enough? Who should decide? How do you factor “quality of life” assessments into the decision? How much voice should be accorded the family in deciding to terminate treatment, “allowing” the patient to die? To whom is the physician responsible?

Other ethical dilemmas emerge in a much less spectacular way. How much information must a physician provide before he can get “informed” consent? What are the moral and legal parameters of the physician-patient relationship? What does the threat of professional malpractice mean to the “art” of medicine? What is a responsible use of human subjects for teaching or research purposes? Does the medical community bear responsibility for curing all of society’s ills and illnesses?

The issues are enormous; each has its own personal and social dimensions.

The College of Medicine and Dentistry of New Jersey is now one of only a small number of health-education communities that is attempting systematically to develop programs in the health care humanities to explore these issues with students before they begin their health careers. The expectation is that by so doing, the students, very early in their academic preparation, will begin to understand the humanistic dimensions of their decisions as health professionals in a more profound and holistic way.

(This is the first of two articles. In the next one, Dr. McIntyre will describe approaches to the health-care humanities being instituted at CMDNJ.)

Physician, Doctor, Surgeon*

“In the United Kingdom every medical practitioner is required to have a qualification as Physician and also as Surgeon (i.e., to have at least a Bachelor’s degree in both medicine and surgery). Many general practitioners still formally style themselves *Physician and Surgeon*, and the survival of the name *surgery* for the general practitioner’s consulting-room is evidence that the two branches of the profession were once less separate than they are now. In ordinary parlance *physician* is more often used to

distinguish the specialist or consultant from the general practitioner than both of them from the surgeon; for that purpose the ordinary distinction is that the former are called Doctor even though they may not have a doctor’s degree and the latter Mister even though they may have one.”

*Fowler HW: *A Dictionary of Modern English Usage*. Second edition. New York and Oxford, Oxford University Press, 1965.

Vaginal and Cervical Cancers Associated with Exposure in Utero to Diethylstilbestrol*

I. *What Is Diethylstilbestrol (DES)?*

DES (Diethylstilbestrol or stilbestrol), a synthetic estrogen-type hormone, was first synthesized in the late 1930's. During the 1940's many physicians throughout the United States and other countries prescribed this substance for pregnant women. Several studies suggested that in complications of pregnancy such as bleeding, threatened miscarriage, or diabetes, this treatment improved salvage of the fetus.

Although its use in pregnancy has been discontinued, DES remains a useful agent for certain menopausal symptoms, certain cases of carcinoma of the breast and prostate, and a few other clinical problems.

II. *Why Were DES-Type Drugs Used in Pregnancy?*

Nearly one pregnancy in five results in spontaneous abortion. Various studies suggested that DES-type drugs given to women likely to have miscarriages decreased the incidence of abortion. Additional investigation indicated that pregnant women with more than one prior miscarriage, diabetes, or toxemia of pregnancy also could benefit from DES administration. These findings were widely publicized during 1940's and 1950's, and prenatal administration of DES-type drugs was extensive.

Later studies disclosed that the administration of DES during pregnancy was less effective than initially thought. Additional clinical research and development of newer compounds gradually diminished their use.

III. *What Is the Cancer Problem Associated With In Utero Exposure?*

In 1971, Drs. Arthur L. Herbst, Howard Ulfelder and David Poskanzer at Massachusetts General Hospital and Harvard Medical School reported a link between maternal DES therapy

during pregnancy and the later occurrence of clear-cell adenocarcinoma of the vagina in female offspring exposed to the drug *in utero*. This initial report was soon confirmed by others.

Soon after the discovery of the initial cases, a Registry of Clear-Cell Adenocarcinoma of the Genital Tract in Young Females was established by Dr. Herbst and Dr. Robert E. Scully with support from the National Cancer Institute and the American Cancer Society. It now contains varying amounts of data on almost 300 cases from the United States and abroad. Registry address is MARP, Room 303, 5841 Maryland Avenue, Chicago, Illinois 60610.

The patients have ranged in age from 7 to 28 years at the time of diagnosis.

Documentation of exposure to DES-type hormones has been established in two-thirds of the fully investigated case histories. Of the vaginal adenocarcinoma cases, more than 80 percent are known to have been exposed to DES-type hormones.

Because DES-type hormones were not administered to some of the mothers of these cancer patients, factors other than maternal hormone administration also may play a role in the etiology of these cancers.

In all cases for which precise treatment dates are available, the drug was initiated before the 18th week of gestation. Dosages and duration of therapy varied widely. However, as little as 1.5 mg. DES administered daily throughout pregnancy was found in one case history to be associated with subsequent cancer in female offspring. Administration of the drug in varying amounts for a week or more during the first trimester also was associated with the subsequent development of cancer.

*Compiled by the Professional and Public Relations Committee of the DESAD Project (Diethylstilbestrol and Adenosis) of the Division of Cancer Control and Rehabilitation, National Cancer Institute, and by the Office of Cancer Communications, NCI, National Institutes of Health, DHEW.

Cancers related to DES-exposure have not been reported in male offspring.

Although the exact number of pregnant women treated with DES or chemically similar compounds during pregnancy is unknown, it has been estimated to be as many as two million. The risk of developing adenocarcinoma in exposed females under 30 years of age appears to be minimal, in view of the large exposed population and the very rare incidence of the disease so far reported. However, as exposed females grow older, the incidence of cancer related to DES-type drugs may change.

IV. *Noncancerous Irregularities*

Early in their investigation, Dr. Herbst and associates noted that most of the vaginal and cervical cancers in the exposed females were associated with vaginal adenosis (the presence of glandular epithelium in the vagina). Benign adenosis is found histologically in over 97 percent of vaginal clear-cell adenocarcinomas, whether or not a history of DES-type drug exposure *in utero* is confirmed. Vaginal adenosis is rare in normal (unexposed) young women.

The results of examinations of females exposed *in utero* to DES-type drugs have been reported in several studies. More than a third of those who were exposed in the first four months of gestation have vaginal adenosis, and more than two-thirds have cervical ectropion (the presence of glandular tissue on the portio vaginalis of the cervix).

Other abnormalities seen in these examinations, such as transverse vaginal and cervical ridges, also may be associated with intrauterine exposure to DES-type drugs. These are described by a variety of names—hood, pseudopolyp, rim, collar, cockscomb cervix.

V. *If the Patient Was Exposed to DES-Type Drugs, What Should Be Done?*

All asymptomatic girls who were exposed *in utero* should receive a thorough pelvic examination at menarche or if they have reached 14 years of age. Younger girls should be examined if they develop abnormal bleeding or discharge.

Whenever prenatal exposure is probable, and there are symptoms of discharge, further investigation is imperative, regardless of the patient's age. This investigation should not be concluded until it is certain that no lesion is present.

Before the examination is undertaken, the entire procedure should be thoroughly discussed with the patient (and her mother or father if she is a minor). The examination should include inspection and palpation, Papanicolaou smear (cervix and vagina), and an iodine staining test of the entire cervix and vagina. Abnormal areas, including those that do not stain with iodine, should be biopsied. This procedure can be performed in the physician's office with small biopsy instruments and without significant discomfort.

For the very young patient who has symptoms that require investigation, anesthesia may occasionally be required before an examination. A small speculum permits adequate visualization of the vagina without undue discomfort in younger patients.

With asymptomatic females, if adequate examination is not possible at the initial visit, vaginal tampons should be used for a few months to allow an adequate examination later without discomfort.

Colposcopy is a useful adjunct to this examination, but it is not essential. Utilizing its low power magnification to examine the vagina and cervix, the physician can identify areas of glandular tissue (adenosis) in the vagina or on the cervix. This identification permits directed rather than "blind" biopsies. Used in conjunction with the iodine staining test and selected biopsy, colposcopy permits precise recording of observed abnormalities and their appraisal at fixed intervals.

VI. *Followup Examinations*

The patient exposed to DES-type drugs should be followed on a regular basis. After a normal initial examination, annual pelvic examinations with cervical and vaginal cytology and iodine staining are probably adequate. If any abnormalities are noted during the initial evaluation,

more frequent followup examinations are suggested (every 3 to 6 months, depending on the severity of the findings).

VII. *Management of Vaginal and Cervical Irregularities Other than Clear-Cell Adenocarcinoma*

Locally destructive measures such as cauterization, cryosurgery, or excision can be utilized if atypical changes such as marked squamous dysplasia or carcinoma *in situ* of the vagina or cervix are found on biopsy.

Optimal management of nonmalignant lesions in females exposed to DES-type drugs *in utero* is uncertain. At the present time, no case has been reported in which vaginal adenosis has progressed to cancer under direct observation. Careful followup appears at present to be the most prudent approach to DES-exposed subjects without carcinoma.

There is no evidence to date indicating that use of oral contraceptives by the DES-exposed population would be undesirable. However, they add further hormonal variables to a complex situation and are one more aspect of the problem requiring more information.

The presence of adenosis is not a contraindication to future pregnancy if the woman desires to have children.

VIII. *Cancer Diagnosis*

The cancers reported in the Registry have been found more often on the cervix or upper anterior vaginal wall than elsewhere. They usually are elevated, soft and friable, with a tendency to invade surrounding tissue early and metastasize through the lymphatic system. The ratio of vaginal to cervical site of origin (classification of the Cancer Committee of the International Federation of Gynecology and Obstetrics) has been approximately two to one.

IX. *Cancer Therapy*

Decisions regarding mode and extent of therapy in these young women are difficult in them-

selves and further complicated by emotionally charged issues. Both surgery and high energy radiotherapy potentially can cure the disease. Cancers associated with DES-type drugs may develop in young women primarily in tissues of Mullerian origin—the upper portion of the vagina and the cervix.

Treatment should be highly individualized and is best accomplished by physicians experienced in treating gynecologic cancers.

Therapeutic Drug Information Center*

The Schwartz Inter-National Pharmaceutic and Therapeutic Drug Information Center of the Brooklyn College of Pharmacy, Long Island University, compiles the information contained in this column each month. The Center serves as a source of intelligence on therapeutic and pharmaceutic information not readily available to physicians, at no charge to them, and provides this information with minimal time involvement. It is staffed by trained pharmacists; Jack M. Rosenberg, Pharm. D., Associated Professor and Chairman, Division of Clinical Pharmacy, Brooklyn College of Pharmacy, is Director and Walter Modell, M.D., Emeritus Professor of Pharmacology at Cornell University Medical College, is pharmacologist consultant. The service is available Monday through Friday from 9 a.m. to 4:30 p.m.—telephone (212) 622-8989 or 636-7535. The following are questions and answers handled by the Center recently.

1. How useful are serum digoxin levels as an indicator for digitalis efficacy and toxicity?

The therapeutic value of digoxin, a drug with narrow margin between therapeutic and toxic concentrations, is associated with problems of control of dosage to maximize benefits while reducing morbidity and mortality. It is not surprising that the measurement of serum digoxin levels by

*This month's column was prepared by J. M. Rosenberg, Pharm. D., P. Sangkachand, B.S., M. K. Raina, M. Pharm. Ph.D., W. A. Simon, Pharm. D., and T. M. John, B.S., Brooklyn College of Pharmacy, LIU.

radioimmunoassay is rapidly becoming a routine test especially with the availability of commercial kits for this purpose.

Studies with radiolabelled digoxin in man have shown that the ratio of serum to myocardial-bound digoxin concentration is relatively constant (1:40-50) in most subjects and does not vary significantly over a period of time or over a wide range of serum concentration. (In advanced coronary artery disease, this relationship is disturbed as digoxin does not bind to infarcted myocardium.¹) Although there is a variation in the individual responses of patients to digitalis, for an optimal therapeutic effect mean serum values generally considered adequate are in the range of 0.9 ng/ml to 2.2 ng/ml.² It may be mentioned here that the evaluation of the sensitivity of commercially available digoxin radioimmunoassay kits shows that many have poor technical ability to distinguish serum digoxin levels below 0.5 ng/ml.³ The concentration of digitalis available in the blood reflects the concentration of the drug at the site of action in the heart provided that there is an attainment of serum-heart tissue equilibrium. Steady-state concentrations usually are achieved after four or five half-lives (half-life is 1.7 days) in a patient on maintenance therapy. It is recommended that serum samples be drawn just prior to the daily dose and six or more hours after the administration of the last dose of the drug.

Studies have indicated that there is a difference between nontherapeutic, therapeutic, and toxic digoxin concentrations. Huffman² reported that non-toxic patients with congestive cardiac failure have lower serum digoxin concentrations than those who had a therapeutic response, possibly indicating that digoxin concentration may be helpful in anticipating therapeutic response.

Monitoring of serum digoxin concentrations serves as a very useful guideline for minimizing toxicity. Reines and Cohen⁴ reviewed 94 cases in which the serum digoxin level was increased above the therapeutic range. The frequency of clinical manifestations of toxicity at the time of the measurement showed overall correlation of 88.4 percent between clinical signs of toxicity and elevated digitalis levels.

Smith and Haber,⁵ in a group of hospitalized patients, observed a correlation between serum digitalis concentration and clinical digitalis intoxication. They found that 90 percent of patients with no evidence of toxicity had digoxin levels of 2.0 ng/ml or below, while 87 percent of the patients with arrhythmias had levels above 2.0. They further observed that there is an overlap between the two groups, and the mean serum digoxin levels in this group varied from 1.6 to 3.0 ng/ml.

In another report, Smith⁶ reviewed the published data on serum digitalis levels and toxicity and observed that mean digitalis levels are significantly higher in patients with electrocardiographic evidence of toxicity compared with patients without such evidence.

A report from the Boston Collaborative study based on monitoring adverse reactions to digoxin in two hospitals in Boston over a two-year period showed that the incidence of adverse reactions was lower in the institution where serum digitalis levels were frequently monitored.⁷

It should be pointed out that a recent report by Ingelfinger

and Goldman⁸ questioned the value of digoxin levels as an indicator of digitalis toxicity. They reviewed 27 published articles to evaluate for methodology vis-a-vis the results. Using their study design for the analysis of data, the authors concluded that the usefulness of the mean serum digitalis concentration as a test for toxicity remains unproved.

In conclusion, it appears from the literature that serum digoxin concentration weighed in the clinical context is useful in the management of patients receiving that drug from the standpoint of therapeutic effect and toxicity.

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2. Could you provide us information on the use of ribavirin as an antiviral agent?

Ribavirin (ICN Pharmaceuticals) is an antiviral agent which is being investigated by several other pharmaceutical companies for its effects against influenza, herpes virus infection, and hepatitis in Latin America and in the United States.

Ribavirin exerts its antiviral effect by inhibiting the enzyme inosine-monophosphate dehydrogenase in the cells infected by them. This interferes with the bio-synthesis of guanine nucleotide, and thus inhibits the synthesis of viral DNA.¹ The aforesaid enzyme inhibition has no significant effect on the protein synthesis of the host cell.²

In a double-blind trial against influenza virus³ (A₂/England 42/72), 21 patients were given ribavirin 100 mg orally three times a day for five days and another 24 patients were given placebo (both groups consisted of girls between the ages of 8-16). Therapeutic efficacy of ribavirin was measured by its effects on fever, pharyngitis, conjunctivitis, and rhinitis. Twenty-four hours after commencement of treat-

ment, the ribavirin-treated group experienced significant reduction in the clinical symptoms of influenza. Forty-eight hours after the initiation of treatment, both groups were checked for virus. Influenza virus was found in 22 of the 24 placebo-treated group and in only three of the 21 ribavirin-treated group.

Ayrosa-Galvao¹ reported a double-blind study in 66 patients with type A hepatitis. Thirty three patients received ribavirin 100 mg every six hours orally for 10 days. The remaining 33 patients served as a control group. Therapeutic effect was evaluated using biochemical tests such as bilirubin, SGOT, and SGPT. The authors found that the rate of recuperation in the ribavirin-treated group was significantly faster than the control group. Three subsequent controlled studies² held in Brazil showed similar results with ribavirin against type A hepatitis.

Zertuche and Perches⁴ conducted a double-blind study to evaluate the efficacy of ribavirin topically in herpes zoster (shingles). They found that topical application of ribavirin 5 percent in the form of an ointment considerably reduced pain and inflammation.

So far no toxicity has been reported from this therapy when the drug was used in normal doses. With three times the normal dose the most significant side effect was anemia, which disappears on discontinuation of therapy. Ribavirin is known to produce abnormalities of the fetus in rodents and hence its use in pregnant women is contraindicated.

From these limited studies, it appears that ribavirin may be a promising antiviral drug. However, well controlled studies in the United States ultimately will establish its use against viral diseases such as herpes, hepatitis, and influenza.

References

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4. Fernandez Zertuche H and Diaz Perches R: Clinical experiences using the antiviral 1-beta-D-ribofuranosyl-1,2,4-triazole-3-carboxamide (ribavirin) in Mexico. Paper presented at Third Conference on Antiviral Substances, Feb. 2-5, 1976, New York Academy of Sciences (Quoted from *Curr Prescrib* 2:11-19, 1976.)
3. Please provide information on the management of insulin resistance.

Recently an excellent review article concerning insulin allergy and insulin resistance appeared in the American Journal of Hospital Pharmacy.¹ The reader is referred to this source for a more in-depth discussion of this topic.

Insulin resistance has been defined as the need, in certain nonketoacidotic diabetic patients, for more than 100 units

of insulin daily persisting for more than two days. In some diabetic patients, insulin resistance is mediated through an immune response (anti-insulin antibodies) and is termed as primary insulin resistance. In other patients, increased insulin requirement (secondary resistance) may be due to an ongoing pathological condition; e.g., sepsis, hormonal excess, or emotional stress. Secondary resistance may also be the result of current administration of drugs such as steroids, thyroid preparations, or thiazide diuretics. In secondary insulin resistance, the treatment of the accompanying pathology or restriction of the causative drug(s) usually reverts patients to normal insulin requirements.

It is well known that almost all patients receiving exogenous insulin develop antibodies within six weeks to three months after initiation of insulin therapy. These antibodies form soluble complexes with exogenous and endogenous insulin, but fortunately only few patients develop insulin resistance.

In the management of primary insulin resistance, usually the source of insulin is changed and all possible diabetogenic factors excluded. If the patient is on beef insulin, pork insulin is tried or vice versa. Sulfated insulin (not yet commercially available in the United States but available in Canada) is less neutralizable by insulin antibodies and less antigenic. It has been used successfully in insulin-resistant patients. Maloney, *et al*² showed that in a group of eleven patients who were resistant to insulin, the substitution of sulfated insulin decreased their insulin requirements to one-tenth to one-fifteenth.

Several investigators have treated insulin resistance with oral hypoglycemic agents and standard dietary control; however, this mode of therapy is restricted to non-ketoacidotic patients who have some functional pancreatic beta cells. Phenformin, which does not depend on functioning beta cells, may also be of value in insulin resistance. Immunosuppressive agents (steroids, antimetabolites, alkylating agents, and antineoplastic drugs) have been used experimentally and clinically to treat insulin resistance. Theoretically, they depress antibody response to exogenous insulin. In addition, steroids may act by inhibiting tissue response to antigen-antibody complexes.

Attempts have been made to treat insulin-resistant patients with non-mammalian insulins such as fish insulin, but these insulins are not commercially available. These nonmammalian insulins differ structurally from mammalian insulin and may not significantly react with antibovine and/or anti-porcine insulin antibodies.

In conclusion, several therapeutic modalities can be utilized in the treatment of primary insulin resistance. Presently available means include changing the animal source of insulin, restricting diabetogenic agents, using oral hypoglycemics, and use of immunosuppressive drugs. The use of nonmammalian insulins, sulfated insulin, and purer forms of insulin appears to be promising as a future method of treating insulin resistance.

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Professional Liability

Medical Malpractice: Evolution of a Statute of Limitations

(This item has been prepared by Robert P. McDonough, Esq., for the Joseph A. Britton Agency, in accordance with a request from the Special Session of the House of Delegates 12/4/75—see JMSNJ 73:166 (February) 1976.)

The law of New Jersey provides that all claims for personal injuries must be filed within two (2) years of the date on which the cause of action accrued. Ordinarily, this means that the plaintiff in a personal injury action must institute suit within two years of the defendant's alleged negligent act. The purpose of this limitation is to protect prospective defendants from stale claims which are often difficult, if not impossible, to investigate and to defend.

Historically, the defendants in medical malpractice actions were afforded the protection of this statute by a literal interpretation of its terms. However, in 1961, the New Jersey Supreme Court adopted the "discovery rule" for purposes of applying the two year statute of limitations to medical malpractice actions. See *Fernandi v. Strully*, 35 N.J. 434 (1961). Succinctly, the "discovery rule" holds that the injured plaintiff's cause of action does not accrue until he discovers or, by the exercise of reasonable diligence, should have discovered that he might have an actionable claim. The *Fernandi* decision limited the discovery rule to cases in which a foreign object, such as a sponge or clamp, had been negligently allowed to remain in the body of a patient. In practice, this meant that the patient could bring his malpractice action within two (2) years after he discovered the foreign body, even though more than two (2) years had elapsed since the procedure during which the foreign object was left behind.

The discovery rule has since been dramatically expanded from this initial limited application and today applies to all malpractice actions regardless of the nature of the alleged deviation. The guidelines for the application of the discovery rule have also been relaxed to the benefit of the allegedly aggrieved plaintiff. Original-

ly, the plaintiff was held to "discover" his cause of action where he learned or, through the exercise of reasonable diligence, should have learned of the injury allegedly related to the defendant's conduct. Now, however, the cause of action is not discovered until the patient learns, not only of the injury, but also that the injury resulted from some fault or deviation of the defendant physician. Thus, in the recent case of *Alfone v. Sarno*, 139 N.J. Super (App. Div. 1976) in which plaintiff allegedly suffered serious medical consequences as a result of the removal of her parathyroid glands, her cause of action was held not to accrue until approximately two (2) years after the surgery, when she was advised by another physician of the parathyroid removal.

The landmark case of *Lopez v. Swyer*, 62 N.J. 267 (1973), also illustrates this refinement of the discovery requirement. In that case the patient received x-ray therapy after the removal of a malignant tumor, which allegedly resulted in severe bodily burns, loss of hair, nausea and spontaneous rib fractures. Plaintiff's cause of action was held not to accrue until five years after the radiation therapy had terminated, when she supposedly overheard a surgeon state to his colleagues: "Gentlemen, this is what happens when the radiologist puts a patient on the table and goes out for a cup of coffee."

In its most recent consideration of the medical malpractice statute of limitations problem, the New Jersey Supreme Court further expanded the statute of limitations. It held that the patient has two (2) years from the discovery of his alleged cause of action within which to institute legal proceedings, regardless of the date of discovery of the alleged malpractice. The defendant physician may avoid this expansive application of the statute only by proving that it will result in peculiar or unusual prejudice to him. See *Fox v. Passaic General Hospital*, 71 N.J. 122, (1976) and *Moran v. Napolitano*, 71 N.J. 133 (1976).

We can now see that the New Jersey Courts have dramatically changed the literal meaning of the statutory language. No longer may the physician, or his insurer, blindly rely upon the

statute to bar the claim which is not prosecuted within the historic two (2) year period. Now the trial courts, on a case-by-case basis, are charged with the responsibility of seeking an equitable and just application of the statute of limitations.

Members of the medical profession now, therefore, have an additional reason for the maintenance of adequate medical records. Not only must the records accurately convey a patient's complaints, history, diagnosis and treatment for medical purposes, they also must be maintained as a written memorial of the activities undertaken which clearly will communicate what was done and not done and why, long after the physician's memory of the event has faded. Only by production of adequate records will a physician be in the position, years later, to refute convincingly any allegations of malpractice that may be brought against him.

Report from the Foundation

Daniel J. O'Regan, M.D., Medical Director

As the United States' Year 201 starts, please accept the best wishes of your Foundation that 1977 will be a happy and tranquil one for all of us. It probably won't be, but we can always hope.

The timing of this article is an exercise in necromancy—the last weeks of 1976 are “conjured up” to predict the state of the world in early 1977. In late 1976, the situation was that a poll was being conducted in the Central New Jersey PSRO area, to see whether the doctors considered Central New Jersey PSRO to be representative of them. The poll was conducted between November 1 and December 1. We were also faced with the need to respond to RFPs (Request For Proposal) for our three unfunded PSRO areas—Bergen, Hudson, and Union. These lengthy documents were prepared by each of those areas with Support Center assistance, and delivered by the November 15 deadline. The difficulty with these developments and their calendar constraints made it impossible to predict the situation by mid-December.

At this point in time, I am assuming that the poll in Area VII (Central New Jersey) has been concluded successfully, and that that area is on its way to Conditional status. The awards for the remaining three areas will be made in the near future, so that 1977 can see the complete coverage of our State with PSRO areas. Support Center activities will be directed toward helping Bergen, Hudson, and Union PSROs to organize and begin their activities, as well as continuing our relationships with those areas previously funded. This year will also see the emergence of the Statewide Professional Standards Review Council, a body which will gain in importance as the program carries on.

The Committee on Individual Practice Associations (IPA) is continuing its work. As utilization review programs become more effective, there will be increased attention from the acute care hospital for inpatient care, toward the use of ambulatory settings, or “alternate” sites of care. To promote the expansion of the traditional patterns of freedom of choice and fee-for-service, the IPA, since it most closely approximates those patterns, deserves our attention. Monitoring of services through the peer review mechanism makes this system efficient, effective, and quality-oriented.

Also on the calendar for this year are increasing attention to long-term care and ambulatory review. The concept of quality assurance will eventually include the whole spectrum. The role of the Health Systems Agencies (HSAs) will become more apparent.

The changeover of the presidency and administration may see unforeseen (and unpredictable) changes in course in various departments. Physician alertness to Washington (and Trenton) needs to be sharpened. AMA, MSNJ, JEMPAC, and your component societies will need your attention and your advice. This Foundation is no exception. We continue to represent you. We need your advice and counsel. Keep informed of the trend affecting the medical care of our fellow citizens. Your opinion is the most valuable. You have the training, the experience, and the genuine concern for your patients.

PHYSICIANS SEEKING LOCATION IN NEW JERSEY

The following physicians have written to the Executive Office of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ANESTHESIOLOGY—Ei Shun Lin, M.D., 3905 Carpenter Avenue, Apt. 1-C, Bronx, New York 10466. China Medical College (Taichung, Taiwan) 1970. Subspecialty, general practice. Board eligible. Solo, partnership, single specialty group. Available July 1977.

Dong Hyun Kim, M.D., 122 Beal Street, Lunenburg, Massachusetts 01462. Yonsei Medical School (Korea) 1962. Board certified. Solo, partnership, single specialty group. Available.

CARDIOLOGY—William S. Sarnat, M.D., 711 Keswick Drive, Iowa City, Iowa 52240. Wayne State 1970. Board certified (IM). Group or hospital-based, teaching post. Available August 1977.

Chao-Tarng Cheng, M.D., 5686 Broadview Road, #2508, Parma, Ohio 44134. Kaohsiung (Taiwan) 1969. Board certified (IM). Group, partnership, solo, or fulltime staff. Available July 1977.

Thomas S. Brodie, M.D., 503 North LaJolla Avenue, Los Angeles, California 90048. Pittsburgh 1972. Group or hospital-based. Available May 1977.

ENDOCRINOLOGY—Daniel L. Lorber, M.D., 119-29th Avenue, South, Nashville, Tennessee 37212. Albert Einstein 1972. Board certified. Group or hospital-based. Available July 1977.

GASTROENTEROLOGY—Robert Molle, M.D., 30-60 Crescent Street, Apt. 4-B, Long Island City, New York 11102. Padova (Italy) 1962. Board eligible. Solo. Available January 1977.

GENERAL PRACTICE—Stanley Y. Lin, M.D., Box 389, Jordan, Montana 59337. Taiwan 1966. Subspecialty, internal medicine. Board certified. Partnership, single or multispecialty group, emergency, solo. Available July 1977.

HEMATOLOGY/ONCOLOGY—C.U. Zachariah, M.D., 174-10 84th Avenue, Apt. 4G, Jamaica, New York 11432. Madras (India) 1970. Board eligible. Group, solo, or hospital-based. Available July 1977.

Jeffrey S. Perchick, M.D., 84 Redfern Drive, Rochester, New York 14620. SUNY (Buffalo) 1972. Board certified (IM). Group or partnership. Available July 1977.

INTERNAL MEDICINE—Martin S. Lerman, M.D., 7601 Holmes Run Drive, Falls Church, Virginia 22040. Georgetown. Board eligible. Group, partnership, or solo. Available July 1977.

Mark A. Sullivan, M.D., 2834 Midvale Avenue, Philadelphia, Pennsylvania 19129. Cornell 1972. Subspecialty, gastroenterology. Board certified. Group or partnership. Available July 1977.

James L. Stammer, M.D., 5314 La Cieniga Circle, San Antonio, Texas 78233. CMDNJ 1970. Subspecialty, gastroenterology. Board eligible. Group, partnership. Available August 1977.

Chia Yian Chou, M.D., 86-31 57th Avenue, Elmhurst, New York 11373. Taipei (Taiwan) 1970. Board eligible. Solo or group. Available July 1977.

Bernard Davidoff, M.D., 344 West 72nd Street, Apt. 3-R, New York 10023. Columbia 1973. Board certified. Group, associate, solo. Available March 1977.

Rasiklal Amin, M.D., 56 Benedict Avenue, Staten Island, New York 10314. Gujarat (India). Board certified. Group, partnership, solo. Available.

James H. Wolf, M.D., 235 Townhouse, Briarcrest Gardens, Hershey, Pennsylvania 17033. NYU 1974. Board eligible. Group or partnership. Available July 1977.

Daniel M. Weinstock, M.D., 60 Plaza Street, Brooklyn, New York 11238. Johns Hopkins 1974. Board eligible. Group or partnership. Available July 1977.

Robert P. Hoffman, M.D., Naval Hospital, Beaufort, South Carolina 29902. Albany 1970. Subspecialty infectious diseases. Board certified. Group, partnership, hospital. Available July 1977.

Antony Cyril Ernest, M.D., 2537A Ocean Parkway, Brooklyn, New York 11235. University of Ceylon 1967. Subspecialty, cardiology. Board certified. Group, partnership, solo. Available July 1977.

Ramesh Chandra Gupta, M.D., 88 Mary Street, Apt. 815, Paterson 07503. R.N.T. Medical School (India). Subspecialty, gastroenterology. Board eligible. Group, partnership, solo. Available July 1977.

Pak-Chun Chan, M.D., 1801 Mt. Pisgah Lane, Apt. 13, Silver Spring, Maryland 20903. National Taiwan University 1970. Primary care group or internal medicine (solo). Available July 1977.

Masood A. Rizvi, M.D., 115 Old Short Hills Road, West Orange 07052. K. G. Medical College (India). Subspecialty, gastroenterology. Board certified. Group, partnership, solo. Available July 1977.

Charles Ifeanyi Okonkwo, M.D., 410 Maryland Avenue, Apt. 1-A, Staten Island, New York 10305. Manchester (England) 1971. Subspecialty cardiology. Board certified. Hospital-based group, partnership, solo. Available July 1977.

James L. Stammer, M.D., 5314 La Cieniga Circle, San Antonio, Texas 78233. CMDNJ 1970. Subspecialty, gastroenterology. Board certified. Partnership, institutionally-based, single-specialty group. Available August 1977.

Carlo Cecchetti, M.D., 400 Artyle Road, Brooklyn, New York 11218. Wisconsin 1972. Subspecialty, gastroenterology. Board eligible. Multi-specialty or single-specialty group, partnership. Available July 1977.

Elihu N. Goken, M.D., 5509 Greentree Road, Bethesda, Maryland 20034. Einstein 1973. Subspecialty, endocrinology. Board eligible. Single or multi-specialty group, partnership, solo. Available July 1977.

Mavidi K. Hariprasad, M.D., Medical Service, New York VA Hospital, 23rd and 1st Avenue, New York 10010. Madras (India) 1971. Subspecialty, nephrology. Board certified. Institutionally based, single or multi-specialty group, partnership. Available July 1977.

Victor G. Galati, M.D., 662 85th Street, Brooklyn, New York 11228. NYU 1972. Subspecialty, pulmonary diseases. Board eligible. Single specialty group, institutionally based, or solo. Available July 1977.

Barry H. Lubin, M.D., 15221 NE 6th Avenue, Apt. A201, Miami, Florida 33162. Hahnemann 1974. Board eligible. Partnership, single or multi-specialty group, industrial, emergency room. Available July 1977.

Charles J. Jaffe, M.D., 6009 Anniston Road, Bethesda, Maryland 20034. Duke 1971. Subspecialties, allergy, hematology. Board certified. Research, single or multi-specialty group, institutionally based. Available July 1977.

David R. Gutknecht, M.D., 174 Townhouse Briarcrest, Hershey, Pennsylvania 17033. Cornell 1971. Board eligible. Single or multi-specialty group, research, institutionally based. Available July 1977.

Ramesh H. Rathod, M.D., 7449 Washington Avenue, Forest Park, Illinois 60130. Bombay (India) 1969. Subspecialty, cardiovascular diseases. Board certified. Single or multi-specialty group, solo. Available July 1977.

Muhammed T. Butt, M.D., 33 Highland Street, Apt. 3-H, New Britain, Connecticut 06052. King Edward (Pakistan) 1971. Subspecialty, gastroenterology. Board certified. Single or multi-specialty group or institutionally based. Available July 1977.

Kenneth S. Lewis, 3701 Twin Lakes Court, Apt. 302, Baltimore, Maryland 21207. Jefferson 1974. Board eligible. Single or multi-specialty group, partnership, emergency room, institutionally based, research, industrial, solo. Available July 1977.

Gene H. Ginsberg, M.D., USAF Hospital Cannon AFB, Clovis, New Mexico 88101. Jefferson 1972. Board certified. Single or multi-specialty group, partnership, solo, or institutionally based. Available July 1977.

Joel R. Schulman, M.D., 319 E. 24th Street, Apt. 25-G, New York 10010. Boston 1972. Subspecialty, pulmonary diseases. Board certified. Single or multi-specialty group, partnership, institutionally based, research, or solo. Available September 1977.

Robert P. Hoffman, M.D., Naval Hospital, Burton, South Carolina 29902. Albany 1970. Subspecialty, infectious diseases. Board certified. Single or multi-specialty group, research. Available July 1977.

Ralph H. Starkey, M.D., 4656 Helensburgh Drive, Chesapeake, Virginia 23321. Temple, 1970. Board certified. Single or multi-specialty group, institutionally-based, research. Available July 1977.

NEPHROLOGY—Stanley B. Garbus, M.D., LSU Medical Center, 1542 Tulane, New Orleans, Louisiana 70112. Geneva (Switzerland) 1962. Subspecialties, internal medicine and public health. Board eligible (IM). Public health, research, academic. Available June 1977.

OBSTETRICS AND GYNECOLOGY—Chaw P. Sun, M.D., 71 Ford Place, Bridgeport, Connecticut 06610. Taiwan 1970. Board eligible. Solo or partnership. Available July 1977.

Meena Aggarwal, M.D., 621 Stuyvesant, 401 Cooper Landing Road, Cherry Hill 08002. King George, Lucknow (India) 1968. Board eligible. Group, partnership, hospital. Available July 1977.

David C. Handwerker, M.D., 9133 Winton Road, Apt. 25, Cincinnati, Ohio 45231. NYU 1973. Board eligible. Group, partnership, solo. Available July 1977.

Alfonso Meza, M.D., 374 Stockholm Street, Brooklyn, New York 11237. Central University Quito (Ecuador) 1967. Partnership, group, solo. Available July 1977.

Marcos A. Lara, M.D., 355 Bard Avenue, Apt. 5-R, Staten Island, New York 10310. Havana, Cuba 1960. Board eligible. Group, partnership, solo. Available July 1977.

Kim, Seung Nam, M.D., 3411 Wayne Avenue, 8-L, Bronx, New York 10467. Catholic Medical College (Korea) 1967. Group or partnership. Available July 1977.

OPHTHALMOLOGY—Howard B. Goldman, M.D., 160 Cabrini Boulevard, New York, New York 10033, NYU (Bellevue) 1973. Solo, associate, or group. Available July 1977.

Appireddy Bommarreddy, M.D., 9293 Pickwick E., Taylor, Michigan 48180. Guntur (India) 1964. Board eligible. Group, partnership, solo. Available July 1977.

George R. Zambelli, M.D., 1353 Bradshire Road, Columbus, Ohio 43220. St. Louis 1973. Board eligible. Partnership, solo, single or multi-specialty group. Available July 1977.

ORTHOPEDICS—A. M. Arain, M.D., 21 Narraticon, Deptford 08096. King Edward, Lahore (Pakistan) 1962. Board certified. Solo. Available April 1977.

PATHOLOGY—Charles K. Allam, M.D., 236 Fuller Terrace, Orange 07050. French Faculty of Medicine, Beirut (Lebanon) 1961. Board certified. Group or partnership (hospital-based). Available.

Emil B. Georgi, M.D., 5556 Broadview Road, Apt. 3621, Parma, Ohio 44134. Ain-shams University (Egypt) Board eligible. Group, partnership, solo. Available July 1977.

Jai Chul Cha, M.D., Institute of Pathology, 2085 Adelbert Road, Cleveland, Ohio 44106. Seoul National University (Korea) 1968. Partnership, solo, single or multi-specialty group, institutionally based. Available.

Amando Valencia Esguerra, M.D., 914 Lafayette Towers West, Detroit, Michigan 48207. Santo Tomas (Manila) 1965. Subspecialty, clinical pathology. Board certified. Partnership, solo, or single-specialty group. Available.

Michael R. Zimmerman, M.D., Univ. of Pennsylvania Hospital, 3400 Spruce Street, Philadelphia, Pennsylvania 19104. NYU 1963. Board certified. Partnership, institutionally based, research. Available.

PEDIATRICS—Francis DiBona, M.D., 265 Parklake, Ann Arbor, Michigan 48103. Wisconsin 1969. Subspecialty, nephrology. Board certified. Large group (hemodialysis). Available September 1977.

Raymond Kahn, M.D., 4635 Clanranald, Montreal, Canada H3X 2R8. McGill 1973. Board eligible. Group partnership, or solo. Available July 1977.

Nawal Siage, M.D., 30-60 Crescent Street, Apt. 4-B, Long Island City, New York 11102. Damascus (Syria) 1971. Board eligible. Group or solo. Available January 1977.

Richard L. Dvorin, M.D., 73 Keene Street, Providence, Rhode Island 02906. Meharry 1974. Board eligible. Group, partnership, or HMO. Available July 1977.

Daniel Cohen, M.D., 2606 Piedmont Road, Apt. C-12, Atlanta, Georgia 30324. SUNY (Downstate) 1974. Group or partnership. Available July 1977.

Soo Wook Chung, M.D., 3365 Arlington Avenue, Apt. #4, Toledo, Ohio 43614. Pusan, Korea 1969. Subspecialty, neonatology. Board eligible. Group or partnership. Available July 1977.

Nazir Ahmad, M.D., 43-44 Kissena Boulevard, Apt. 8-M, Flushing, New York 11355. Kashmir (India) 1968. Group, partnership, solo. Available.

Dion Ferandes, M.D., 3205 Cleary Avenue, No. 2, Metairie, Louisiana 70002. Poona (India) 1969. Subspecialty, allergy. Board certified. Available July 1977.

Do Sung Hwang, M.D., 1925 N. Senate Avenue, #26, Indianapolis, Indiana 46202. Pusan (Korea) 1964. Board eligible. Group, partnership, solo, or hospital. Available July 1977.

Robert A. Shanik, M.D., 8 Wooley Lane, Apt. B-24, Great Neck, New York 11023. Virginia 1974. Group or partnership. Available July 1977.

John Ertl, M.D., 4827 J Parkway, Sacramento, California 95823. SUNY (Downstate) 1970. Board eligible. Group or partnership. Available August 1977.

Joung Wha Lee, M.D., 1695 Walker Avenue, Union 07083. Seoul (Korea) 1967. Subspecialty, general practice. Partnership, solo, emergency room, public health. Available July 1977.

Edathil Karuna Karan, M.D., 1609 Gateway, Albert Lea, Minnesota 56007. Madras (India) 1959. Board certified. Single or multi-specialty group, research. Available.

Karunyan Arul, M.D., 766 Shepard Avenue, Hamden, Connecticut 06514. University of Ceylon (Sri Lanka) 1966. Board certified. Research, group, partnership, academic, public health, emergency room. Available October 1977.

Narayan Pundarik Nayak, M.D. 436 South Lansdowne Avenue, Apt. F-101, Yeadon, Pennsylvania 19050. Subspecialty, hematology. Board certified. Group, institutional, partnership, solo, industrial, emergency room, public health, research. Available.

David M. Namerow, M.D., 638 Hallmark Drive, Glen Burnie, Maryland 21061. Louisville (Kentucky) 1972. Board eligible. Single or multi-specialty group, institutionally based. Available July 1977.

PHYSICAL MEDICINE AND REHABILITATION—

Marius Focseneanu, M.D., 66-36 Yellowstone Boulevard, Apt. 15-G, Forest Hills, New York 11375. Bucharest 1959. Board eligible. Institutional group.

Jau-Shiung Huang, M.D., 37-16 83rd Street, Apt. 2-G, Jackson Heights, New York 11372. Kaohsiung (Taiwan) 1967. Board eligible. School health or institutionally based. Available.

PSYCHIATRY—Melvin W. Cohen, M.D., 81 Clarkson

Avenue, Brooklyn, New York 11203. Meharry 1968. Board eligible. Clinic, hospital-based, or group. Available January 1977.

Herbert Schein, M.D., 20 Hospital Drive, Toms River 08753. Leiden (Holland) 1968. Board eligible. Clinic, group, partnership, association, or solo. Available.

Paul King, M.D., 445 East 68th Street, New York 10021. Cornell 1974. Board eligible. Partnership, single or multi-specialty group, institutionally based, school health, administrative. Available July 1977.

PULMONARY MEDICINE—Donald L. Epstein, M.D.,

9 Winding Brook Drive, Apt. 2F, Gunderland, New York 12084. CMDNJ 1972. Board eligible. Group, partnership, solo. Available July 1977.

Lawrence S. Slotnick, M.D., 2157 Hawaii Avenue, Forrestal Village, Great Lakes, Illinois 60088. SUNY (Downstate) 1970. Group or hospital. Available July 1977.

RADIOLOGY—Phyllis R. Jarvis, M.D., 5116 Profes-

sional Drive, Apt. 88, Wichita Falls, Texas 76302. NYU 1970. Special interest—diagnostic and pediatric radiology. Board certified. Group, partnership, academic. Available July 1977.

Romeo C. Ouano, M.D., 3811 Albemarle Avenue, Drexel Hill, Pennsylvania 19026. Santo Tomas (Philippines) 1961. Special interest—diagnostic radiology and nuclear medicine. Board eligible. Group or hospital-based. Available July 1977.

SURGERY—Peter A. Jarvis, M.D., 5116 Professional Drive, Wichita Falls, Texas 76302. Cornell 1970. Board certified. Group, partnership. Available July 1977.

Kenneth R. Pozner, M.D., 265-24 74th Avenue, Floral Park, New York 11004. NYU 1970. Partnership or group. Available July 1977.

Kenneth N. Holwitt, M.D., 3350 Tisdale Drive, Lexington, Kentucky 40504. West Virginia 1968. Subspecialty, cardio-thoracic surgery. Board eligible. Group. Available July 1977.

Darayes S. Mobed, M.D., 80 Guion Place, Apt. 11-N, New Rochelle, New York 10801. Dow, Karachi (Pakistan) 1971. Subspecialty, peripheral vascular surgery. Board eligible. Partnership, group. Available July 1977.

Norman L. Maron, M.D., Quarters 1216, MCB, Quantico, Virginia 22134. NYU 1970. Subspecialty, orthopedic surgery. Board eligible. Partnership or group. Available July 1977.

Richard Sacks, M.D., 43B Cambridge Terrace, Hackensack 07601. Meharry 1972. Board eligible. Solo, group, association. Available July 1977.

Walid Ibrahim Sidani, M.D., 10016 Squire Meadows, #8, St. Louis, Missouri 63123. French Faculty of Medicine, Beirut (Lebanon) 1972. Subspecialty, urological surgery. Partnership, solo, single or multi-specialty group, research. Available July 1977.

Julian A. Gordon, M.D., 606 East Colonial Apts., Cherry Hill, 08002. Maryland 1970. Subspecialty, urological surgery. Board eligible (US). Partnership, solo, single or multi-specialty group, institutionally based, public health, research, administrative. Available August 1977.

Guillermo C. Elkouss, M.D., 1103 East Cherry Hill Apts., Cherry Hill 08002. Buenos Aires 1971. Subspecialty, urological surgery. Board eligible (US).

Partnership, single or multi-specialty group, research, solo. Available July 1977.

Syed Sikandar Madad, M.D., 260-18 73rd Avenue, Glen Oaks, New York 11004. Punjab (Pakistan) 1967. Subspecialty, urological surgery. Board eligible (US). Group, partnership, solo. Available July 1977.

Joseph C. Andolino, M.D., 71A Southbrook Drive, Eatontown 07724. CMDNJ 1973. Subspecialty, orthopedic surgery. Group, partnership, solo, research, emergency room, industrial, public health, academic. Available July 1977.

Kyung I. Kim, M.D., 2103 C Prior Road, Wilmington, Delaware 19809. Seoul (Korea) 1968. Subspecialty, orthopedic surgery. Group partnership, solo. Available July 1977.

Ashok Kumar Sinha, M.D., State General Hospital, Durgapur-6, West Bengal, India. Darbhanga (India) 1963. Group, partnership, solo, research, academic, institutionally based. Available.

UROLOGY—Stuart Zykorie, M.D., 152 Baltic Street, Brooklyn, New York 11201. NYU (Downstate) 1972. Board eligible. Partnership or group. Available July 1977.

Stephen C. Rochman, M.D., 529 Martin Avenue, Morgantown, West Virginia 26505. Meharry 1970. Board eligible. Partnership or group. Available July 1977.

Alexander M. Panossian, M.D., 21 River Street, Apt. 386, Little Ferry 07643. Beirut (Lebanon) 1964. Board eligible. Any situation considered. Available.

Jeffrey Kossow, M.D., 414 Fireside Lane, Cherry Hill 08003. Georgetown 1969. Board eligible. Group, partnership, or association. Available July 1977.

Mohammad Taghi Tavassoli, M.D., 30 Pryer Lane, Larchmont, New York 10538. Tehran (Iran) 1967. Board eligible. Group, partnership, solo, or institutional. Available July 1977.

Steven Katz, M.D., 2500 Johnson Avenue, Riverdale, New York 10463. SUNY (Buffalo) 1969. Board eligible. Group, partnership. Available.

PATRONIZE OUR ADVERTISERS

They Merit Your Support

LETTERS TO THE JOURNAL

In Appreciation

October 22, 1976

Dear Dr. Krosnick:

On behalf of the Academy I would like to take this opportunity to thank you for your excellent editorial in the October *Journal* (73:819) entitled "Support the Academy of Scholars." Your effort is particularly appreciated at a time when many demands for CME are being placed on the Academy and we need all of the support we can use.

(signed) Charles J. Heitzmann
Executive Director, AMNJ

Pharmaceutical Assistance to Aged

November 1, 1976

Dear Doctor Krosnick:

Pharmacists throughout New Jersey have been concerned with the general lack of public awareness on Public Law 1975, Chapter 194, concerning Pharmaceutical Assistance to the Aged. This program allows senior citizens to be reimbursed by the state for prescription drugs. During the developmental stage, it was our opinion that senior citizens who lived on fixed income required some type of payment program in order to obtain necessary life-sustaining medications. Since the bill's inception, the state has paid out to senior citizens only \$25,000 despite the fact that \$1,000,000 was appropriated for the period beginning August 1975 through December 1, 1975.

Senior citizens do need to be made aware of the program's assistance. We hope that physicians will support pharmacists in this public awareness campaign and inform their patients that a reimbursement program is available, and that they may qualify. Applications are available

through local pharmacies as well as the Medicaid office. This program has the potential to assist thousands of senior citizens throughout the state of New Jersey. We are asking all physicians to help their senior citizens by advising them that information is available at their pharmacy.

(signed) Dorothy S. O'Connor, R.P.
Director of Communications
New Jersey Pharmaceutical Association

A Plea for Concise and Accurate Language

November 9, 1976

Dear Doctor Krosnick,

Enclosed is a copy of a newsletter* from the New Jersey Health Services Program, which attempts to indicate a medical service for which reimbursement will be denied.

My complaint is that this memorandum represents another example of an atrocious assault on the English language. While bureaucracies have never acquired a reputation as stout defenders of good English, I must protest the verbose and inaccurate language used in this missive. I implore you, as the editor of a scholarly and widely-read state journal, to lead in the opposition to such gross distortions of our mother tongue.

It often has been stated that the goal of good expository writing is to be clear, concise, and accurate. It seems that this should be especially true when an official state bureau issues information and instructions of essential importance to practicing physicians. Too often the concepts of the law and the regulations at any governmental level are sufficiently difficult to grasp; without the addition of obfuscation of improperly used language.

The first paragraph of the enclosed "newsletter" is a sentence composed of clauses strung together like sausages and whose fundamental statement is incorrect. That is, the endorsement of the stated position is *not* a national public health effort, nor is it an endeavor to protect the population.

I have no quarrel with the content of the circular, but only with the muddiness of its wording which required me to read it through four times before the meaning became clear.

I have pointed out in a previous letter to you how our own State Medical Society has been guilty of such verbal monstrosities and again I urgently request that you give public attention to the need for clarity and accuracy in published medical writing.

(signed) Clement H. Kreider, Jr., M.D.

*Newsletter — New Jersey Health Services Program
October 21, 1976, Volume 1-172
To: All Providers
Subject: "Swine Flu" Immunization

As a national public health effort and in an endeavor to protect the population of the State of New Jersey against a potential flu epidemic, The Medical Society of New Jersey and the New Jersey Association of Osteopathic Physicians and Surgeons have endorsed the following position as it relates to swine flu immunization and the New Jersey Medicaid Program.

In view of the federal prohibition against Medicaid reimbursement for those resources available free of charge to the public, the New Jersey Medical Program will not reimburse any provider for services related to the administration of either mono or bivalent swine flu vaccine given under this national public health effort. Your cooperation is appreciated.

Is Unionization the Answer?

November 19, 1976

Dear Friend:

Whilst there are sentimental reasons for New Jersey doctors to continue as individual practitioners, they are greatly handicapped when trying to achieve sensible and desired improvements in their relations with the legislature, the governor, hospital boards, nurses, or other medical auxiliaries, all or most of whom are already unionized.

I have no personal involvement therein, for I retired from practice last January when I saw what lay ahead of me if I continued to practice. So, I am viewing this question objectively. How soon would doctors achieve their goals, if their representative could say to the New Jersey Senate or House, "Grant us the passage of a

law limiting professional liability, and appeals from judgments therein or you will cease to have doctors practicing in this state after next month."?

When New Jersey doctors realize that we no longer have a "government of the people, for the people, and by the people" but a government by mob pressure, perhaps they will sense the necessity to organize. I was an opponent of unionization 'til very recently because I did not look at the problem objectively and impersonally as I have been able to do since my retirement.

I am glad that I am 86 years old, for that assures me that I shall not live to experience difficulties and disappointments certain to be a part of what I perceive our State and Nation are headed for. I trust you will publish this letter so that doctors of our State may know what a 63-year veteran thinks of their present and future prospects.

(signed) Albert G. Hulett, M.D.

Information Needed on
Walter Oschner, M.D.

November 24, 1976

Dear Editor:

We would be grateful if you can run the following appeal: For a biography of Dr. Alton Ochsner of Ochsner Clinic, New Orleans, opinions, evaluations, anecdotes, reminiscences, and photographs are needed. The photographs will be carefully handled and returned. All material will be gratefully received by Ira Harkey, Ph.D., 401 Metairie Road, 706, Metairie, Louisiana 70005.

(signed) Ira B. Harkey, Jr., Ph.D.

1977 Annual Meeting
May 14-17

ANNOUNCEMENTS

Course in Pediatric Clinical and Theoretical Allergy

In cooperation with the New Jersey Medical School, CMDNJ, the Children's Hospital of Newark is sponsoring a review course in clinical problems in pediatric allergy designed for pediatricians, family physicians, and allergists. The program runs from September through May. Lectures are held each Thursday from 11 a.m. to 12 noon in the Chapel Conference Room at United Hospitals of Newark. In addition a pediatric allergy clinic will be held from 8:30 to 10 a.m. on each of these days, and from 12 noon to 1 p.m. there will be a pediatric conference. Hour-for-hour credit will be awarded in Category I of the AMA Physician's Recognition Award. Tuition is \$100. For information, please address a communication to Arthur F. Fost, M.D., Director of Allergy, Children's Hospital of Newark, 15 South 9th Street, Newark 07107.

The schedule for January and February is as follows:

- Jan. 6—Office Management of Allergic Child
- Jan. 13—Chronic Chest Diseases in Children
- Jan. 20—Complications and Prognosis of Asthma
- Jan. 27—Pediatric Pulmonary Conference
- Feb. 3—Hypersensitivity Pneumonitis
- Feb. 10—Aeroallergens, Air Pollutants, and Respiratory Disease
- Feb. 17—Molds and Pollens
- Feb. 24—Pediatric Pulmonary Conference

Symposium on Primary Care

The Johns Hopkins University School of Medicine in conjunction with Baltimore City Hospitals, will present a one-day symposium on problems in adult primary care, January 29, 1977, at Baltimore City Hospitals. Lectures and informal discussions will be featured. Application has been made for credit in AMA Category I. The fee is \$40 and further information may be obtained from the Office of Continuing Education, Room 17, Turner Auditorium, 720 Rutland Avenue, Baltimore, Maryland 21205.

Gynecologic Laparoscopy

The New Jersey Fertility Foundation will sponsor a course in gynecologic laparoscopy in Roselle Park on the following dates during 1977: January 22 and 23; June 3 and 4; and October 14 and 15. For information please communicate with Sidney A. Wilchins, M.D., 14 East Westfield Avenue, Roselle Park, New Jersey 07204.

Symposium on Neoplastic Disorders

On February 10 and 11, 1977, at the Johns Hopkins Medical Institutions, Rutland Avenue, Baltimore, the Johns Hopkins Comprehensive Cancer Center is offering a symposium on diagnosis and management of neoplastic disorders. There will be formal lectures, panel presentations, workshops, a clinicopathological conference, and an opening tour of the new Cancer Center building. Topics include controversies in diagnosis and management of breast cancer, oncologic emergencies, approaches to soft tissue sarcomas, acute leukemia in adults, and non-Hodgkin lymphoma. Six workshops are listed—New Directions in Colon Cancer; Pharmacology of Anti-neoplastic Agents; Infections in Malignant Diseases; Ovarian Cancer; Pediatric Malignancies; and Blood Banking and Oncology. The fee is \$125, which includes a dinner and reception. Approval has been given for 15½ Category I credit hours. For information and a registration card please communicate with the Johns Hopkins Comprehensive Cancer Center, 550 North Broadway, Suite 303, Baltimore, Maryland 21205.

Symposium on Cancer Treatment and Research

From March 24 to 26, the Baltimore Cancer Research Center, National Cancer Institute, and the University of Maryland School of Medicine will present a comprehensive symposium designed to review current concepts of the natural history and management of a variety of

neoplastic diseases. The symposium will include sessions dealing with environmental and viral oncogenesis, regulation of cell growth, pharmacokinetics and common chemotherapeutic agents. There will be a review of supportive care and the complications of cancer treatment, a critical appraisal of immunotherapy as a treatment modality, and discussion on the management of selected tumors, including breast carcinoma, multiple myeloma, testicular carcinoma, small cell carcinoma of the lung, and prostatic carcinoma. For additional information, please communicate with the Program for Continuing Education, University of Maryland School of Medicine, 655 West Baltimore Street, Room 14-016, Baltimore, Maryland 21201.

Course on Pathology of Bone and Joints

Under the sponsorship of the Johns Hopkins Medical Institutions a graduate course on path-

ology of bone and joints will be presented from May 2 to 6, 1977. This is a correlative course designed for pathologists, orthopedists, and radiologists. Structure, development, and function of the skeletal and articular systems will be discussed in relation to developmental, inflammatory, metabolic, and neoplastic disorders. Formal lectures will be supplemented by laboratory sessions with microscope study of slides. Participants are encouraged to bring problem x-ray films and histologic slides for discussion during the informal sessions. Individual microscopes are required and should be brought to the course by participants. Tuition is \$350. Approval has been given for 50 credit hours in Category I of the AMA Physician's Recognition Award. For additional information and application, please communicate with the Program Coordinator, Office of Continuing Education, Turner Auditorium, Room 17, 720 Rutland Avenue, Baltimore, Maryland 21205.

MEETINGS OF MEDICAL INTEREST

This listing is compiled through the cooperation of the Committee on Medical Education of The Medical Society of New Jersey, the Academy of Medicine of New Jersey, the New Jersey Chapter of the American Academy of Family Physicians, and the Office of Continuing Medical Education of the College of Medicine and Dentistry of New Jersey. For information on accreditation, please contact the sponsoring organization(s), indicated by italics—last line of each item.

Jan.

12 Weakness and Fatigue

9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)

12 Special Rounds, Pediatrics

10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)

12 Clinical Immunology

11:30 a.m. — Rahway Hospital
(Sponsored by AMNJ and AAFP)

12 Surgery in Ulcerative Colitis

1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)

12 Endocrine Diseases of the Male and Female Gonads

9-11 a.m. — Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)

12 Lithium Therapy

1:30-2:30 p.m. — Trenton Psychiatric Hospital
(AMNJ and Trenton Psychiatric Hospital)

12 Anorexia Nervosa — A Psychomatic Paradigm

9:00-10:30 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)

12 Use of Local Anesthesia in the High-Risk Surgical Patient

26 Arthritis

1-3 p.m. — Christ Hospital, Jersey City
(Sponsored by Christ Hospital and AMNJ)

13 Echo-Cardiography: The Left Ventricle

7:30-9:30 p.m. — East Orange General Hospital
(Sponsored by N.J. Institute of Ultrasound in Medicine, East Orange General Hospital and AMNJ)

13 Chronic Chest Disease in Children

11 a.m.-12 noon — United Hospitals of Newark
(Children's Hospital of Newark and CMNJ)

- Topics in Neurosurgery**
13 4-5 p.m. — VA Hospital, East Orange
20 (*Sponsored by CMDNJ, VA Hospital, East Orange*
27 *and AMNJ*)
- Peripheral Nerve Lesions**
17 **Spinal Hip Fractures**
20 **Bone Tumor**
24 **Pharmacologic Effects of Chemotherapeutic Agents**
27 **Sequential Management of Cancer**
31 **Abdominal Trauma**
5-6 p.m. — St. Francis Medical Center, Trenton
(*Sponsored by St. Francis Medical Center*)
- Workshop on Hypertension**
13 11:45 a.m.-12:45 p.m. — Kennedy Medical Center,
Edison
(*Sponsored by Kennedy Medical Center*)
- Pacemaker Therapy and Chronic Myocardial Disease**
27 **Depression**
10:30 a.m. — Monmouth Medical Center
(*Sponsored by Monmouth Medical Center and AAFP*)
- Management of Breech Presentation**
13 11 a.m. — Monmouth Medical Center
(*Sponsored by Monmouth Medical Center and AAFP*)
- Clinical Case Presentation**
15 9 a.m.-12 noon — St. Barnabas Hospital, Livingston
(*Sponsored by AMNJ, Orton Society, St. Barnabas*
Hospital and Essex County Psychological Association)
- Couple and Family Therapy**
17 8:30-10:30 p.m. — 314 Broadwell Ave., Union
24 (*Sponsored by AMNJ and N.J. Center for Family*
31 *Studies*)
- Endotoxic Shock**
18 12 noon — St. Mary's Hospital, Orange
(*Sponsored by AMNJ and AAFP*)
- Regional Chest Conference, Northern New Jersey**
18 7:30-9:30 p.m. — St. Joseph's Hospital and Medical
Center, Paterson
(*Sponsored by New Jersey Thoracic Society and*
AMNJ)
- Hypercalcemia with Emphasis on Hyperparathyroidism**
18 8:00-9:00 a.m. — Greater Paterson General Hospital,
Wayne
(*Sponsored by Greater Paterson General Hospital*
and AMNJ)
- Treatment of the Violent Patient**
19 2:00-5:00 p.m. — Camden County Psychiatric Hospital,
Lakeland
(*Sponsored by Camden County Psychiatric Hospital*
and AMNJ)
- Approach to Thyroid Nodule**
19 10:30-12 noon — Passaic General Hospital
(*Sponsored by Hahnemann Medical College and*
AAFP)
- Clinical Psychiatry Series**
19 1 p.m.-2:30 p.m. — New Jersey Medical School, New-
ark
(*Sponsored by CMDNJ and AMNJ*)
- Alcoholism**
19 1 p.m.-2:30 p.m. — Marlboro Psychiatric Hospital
(*Sponsored by Marlboro Psychiatric Hospital and*
AMNJ)
- Hepatitis**
19 1 p.m. — Trenton Psychiatric Hospital
(*Sponsored by AMNJ and AAFP*)
- Acid Base Disturbances**
19 9-11 a.m. — Riverview Hospital, Red Bank
(*Sponsored by Riverview Hospital and AAFP*)
- Out-Patient Management of COPD**
19 11:30 a.m.-12:30 p.m. — V.A. Hospital, East Orange
(*Sponsored by East Orange V.A. Hospital*)
- Pathophysiology of Anemia**
19 9-11 a.m. — Middlesex General Hospital
(*Sponsored by Middlesex General Hospital and*
AAFP)
- Special Rounds, General Surgery and Specialties**
19 10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(*Sponsored by St. Mary's Hospital*)
- The Violent Patient**
19 3-4:30 p.m. — Fair Oaks Hospital, Summit
(*Sponsored by AMNJ & Fair Oaks Hospital*)
- Surgical Grand Rounds — Gastrointestinal Fistulas**
19 4 p.m. — St. Francis Medical Center, Trenton
(*Sponsored by St. Francis Medical Center*)
- Asthma**
20 11 a.m.-12 noon — United Hospitals of Newark
(*Sponsored by Children's Hospital of Newark and*
CMDNJ)
- Immunologic and Pathophysiological Aspects of Asthma**
20 5-6:30 p.m. — Somerset Hospital, Somerville
(*Sponsored by Allergy Society*)
- Sex Therapy — The Impotent Male**
20 11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edi-
son
(*Sponsored by Kennedy Medical Center*)
- Up-Date on Infectious Diseases**
20 9-11 a.m. — Dover General Hospital
(*Sponsored by Dover General Hospital and AMNJ*)
- Gynecologic Endoscopy — Didactic Sessions**
20 9 a.m.-5 p.m. — Memorial General Hospital, Union
- Gynecologic Endoscopy — Operating Room Practical Sessions**
21 8 a.m.-4 p.m. — Memorial General Hospital, Union
(*Sponsored by N.J. Fertility Foundation and AMNJ*)
- Clinical Immunology**
21 12 noon — Freehold Area Hospital
(*Sponsored by AMNJ and AAFP*)
- Bleeding Diseases**
21 4:30 p.m. — Holiday Inn, Deepwater
(*Sponsored by Salem County Medical Society, AMNJ*
and AAFP)

- 21 **Electrocardiography and Arrhythmia**
 - 23 **Playboy Resort and Country Club, Great Gorge**
(Sponsored by International Medical Corporation and AAFP)
 - 21 **Socialization in Infancy**
10 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
 - 22 **Hepatic Resection**
10 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
 - 23 **Clinical Approach of Acid-Base Disturbances**
10-11 a.m.—Bayonne Hospital
Case Reviews of Acid-Base Disorders
11 a.m.-12 noon—Bayonne Hospital
(Sponsored by Bayonne Hospital and CMDNJ)
 - 25 **Child Abuse and Neglect**
8 p.m.—Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
 - 26 **Hepatitis**
1:30-3 p.m.—St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
 - 26 **Malignant Melanomas**
9-11 a.m.—Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)
 - 26 **Gram Negative Infections in Surgery**
9-11 a.m.—Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
 - 26 **Special Rounds, Internal Medicine**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
 - 27 **Pediatric Pulmonary Conference**
11-12 noon—United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
 - 27 **Sex Therapy—Non-Orgasmic Female**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
 - 27 **Treatment of Malignant Melanoma**
12 noon-1 p.m.—Englewood Hospital
(Sponsored by Englewood Hospital Cancer Committee and AMNJ)
 - 29 **Family Systems Theory and Therapy**
10 a.m.-12 noon—Seton Hall University, South Orange
(Sponsored by AMNJ and New Jersey Center for Family Studies)
- Feb.
- 1 **Pre-Hospital Coronary Care**
11 a.m.—Greystone Park Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
 - 1 **Burn Management**
5-6 p.m.—CMDNJ-Rutgers Medical School, Piscataway
(Sponsored by AMNJ and CMDNJ-Rutgers Medical School)
 - 2 **Schizophrenia**
3-4:30 p.m.—Fair Oaks Hospital, Summit
(Sponsored by AMNJ and Fair Oaks Hospital)
 - 2 **Vascular Gut**
1-5 p.m.—St. Barnabas Medical Center, Livingston
(Sponsored by AMNJ, New Jersey Gastroenterological Society, and St. Barnabas Medical Center)
 - 2 **Renal Energy Metabolism**
9:15-10:15 a.m.—St. Barnabas Medical Center, Livingston
(Sponsored by AMNJ and St. Barnabas Medical Center)
 - 2 **Laboratory Interpretations**
9-11 a.m.—Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
 - 2 **Special Rounds, Pathology**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
 - 2 **Gastrointestinal Bleeding**
1 p.m.—Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)
 - 2 **Gout and Pseudogout**
9-11 a.m.—Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)
 - 2 **The Tasks of Psychiatry**
 - 16 **Biology and Gender Role**
1-2:30 p.m.—New Jersey Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
 - 2 **Ulcerative Colitis and Ileitis**
 - 16 **Treatment of Common Dermatoses**
10:30-12 noon—Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
 - 3 **Topics in Neurosurgery**
 - 10 **4-5 p.m.—VA Hospital, East Orange**
 - 17 **(Sponsored by CMDNJ, VA Hospital, East Orange, and AMNJ)**
 - 3 **Hypersensitivity Pneumonitis**
11 a.m.-12 noon—United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
 - 3 **Low Renin Hypertension**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
 - 3 **Digestive Physiology**
 - 7 **Vascular Trauma**
 - 10 **Thyroid and Parathyroid Diseases and Surgery**
 - 14 **Soft Tissue Handling and the Emergency Room**

- 17 **Acute Burn Care**
- 24 **Maxillo-Facial Trauma and Surgery**
- 28 **Radio-Therapy**
5-6 p.m.—St. Francis Hospital, Trenton
(Sponsored by St. Francis Hospital)
- 4 **Complications of Heart Failure**
12 noon- 1 p.m.—St. Mary's Hospital, Orange
(Sponsored by AMNJ and St. Mary's Hospital)
- 4 **Laboratory Interpretations**
8:30 a.m.—United Hospitals of Newark
(Sponsored by AMNJ and AAFP)
- 4 **Dilemmas in Informed Consent**
8:30-10 p.m.—Bergen Pines County Hospital, Paramus
(Sponsored by Bergen Pines County Hospital, Bergen County Medical Society and AMNJ)
- 5 **Family Systems Theory and Therapy**
- 12 10 a.m.-12 noon—Seton Hall University, S. Orange
- 19 (Sponsored by AMNJ and New Jersey Center for
- 26 **Family Studies**)
- 7 **Couple and Family Therapy**
8:30-10:30 p.m.—314 Broadwell Ave., Union
(Sponsored by AMNJ and New Jersey Center for Family Studies)
- 7 **Married Couple with Severe Sexual Difficulties**
8-10 p.m.—11 Ridgewood Ave., Glen Ridge
(Sponsored by Essex Psychiatric Seminar and AMNJ)
- 7 **Coronary Artery Disease**
1 p.m.—Ancora Psychiatric Hospital, Hammonton
(Sponsored by AMNJ and AAFP)
- 7 **Vascular Surgery**
8 p.m.—Community Memorial Hospital, Toms River
(Sponsored by AMNJ and AAFP)
- 8 **Cerebral Vascular Disease**
8 p.m.—Paul Kimball Hospital, Lakewood
(Sponsored by AMNJ and AAFP)
- 8 **Acute Renal Failure**
9 p.m.—Bayonne Hospital
(Sponsored by AMNJ and AAFP)
- 8 **Ovarian Tumors**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 9 **Genetic Counseling**
1-3 p.m.—Christ Hospital, Jersey City
(Sponsored by Christ Hospital and AMNJ)
- 9 **Management of Hepatitis**
11:30 a.m.—Rahway Hospital
(Sponsored by AMNJ and AAFP)
- 9 **Current Chemotherapy**
1:30 p.m.—Runnells Hospital, Berkeley Heights
(Sponsored by AMNJ and AAFP)
- 9 **Fluid and Electrolyte Imbalance**
1:30-3 p.m.—St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 9 **Hyperaldosteronism**
9-11 a.m.—Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)
- 9 **Common Intestinal Parasites**
9-11 a.m.—Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 9 **Special Rounds, Obstetrics—Gynecology**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 9 **Psychiatry—Studies in the Subjective Sense of Time**
1-2:30 p.m.—Marlboro Psychiatric Hospital
(Sponsored by Marlboro Psychiatric Hospital and AMNJ)
- 10 **Aeroallergens, Air Pollutants and Respiratory Disease**
11 a.m.-12 noon—United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 10 **Exercise and Cardiac Rehabilitation**
- 24 **Occupational Lung Disease**
10:30 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 10 **Diseases of the Vulva**
11 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 10 **Renal Transplantation**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 11 **Pancreatitis**
9-10 a.m.—St. Francis Hospital, Trenton
(Sponsored by Hahnemann Medical College and AAFP)
- 14 **Family Structure and Therapy**
9-10:30 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 15 **Gallstones**
8:30-9:30 p.m.—Irvington General Hospital
(Sponsored by AMNJ and Irvington General Hospital)
- 15 **Thyroid Disease**
12 noon—St. Mary's Hospital, Orange
(Sponsored by AMNJ and AAFP)
- 15 **Anesthetic Air Pollution in the Operatory**
8:30 p.m. (preceded by dinner at 6 p.m.)—Fireside Inn, Rochelle Park
(Sponsored by Dental Section, AMNJ)
- 16 **Grand Rounds—Shock and Critical Support**
4 p.m.—St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)

- 16 Nutrition**
1 p.m. — Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)
- 16 Thanatology**
3 p.m. — Fair Oaks Hospital, Summit
(Sponsored by AMNJ and AAFP)
- 16 The Violent Patient**
1 p.m. — Trenton Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
- 16 Congestive Heart Failure**
9-11 a.m. — Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)
- 16 Clinical Physiology of the Control of Breathing**
11:30 a.m.-12:30 p.m. — V.A. Hospital, East Orange
(Sponsored by East Orange V.A. Hospital)
- 16 Psychosomatic Problems in Children**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 16 Special Rounds, General Surgery and Specialties**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 17 Molds and Pollens**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 17 Contact Dermatitis**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 17 Cardiovascular Aspects of Jogging**
5-6:30 p.m. — Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
- 18 Sports Medicine**
4:30 p.m. — Holiday Inn, Deepwater
(Sponsored by Salem County Medical Society, AMNJ and AAFP)
- 18 Blood Gases**
12 noon — Freehold Area Hospital
(Sponsored by AMNJ and AAFP)
- 18 Immuno-Therapy for Lung Cancer**
8-10:30 p.m. — Glen Ridge Country Club
(Sponsored by AMNJ and New Jersey Society of Thoracic Surgeons)
- 19 Endocrinology and Metabolism**
26 Frenchman's Reef Hotel, St. Thomas, Virgin Islands
(Sponsored by AMNJ and CMDNJ-New Jersey Medical School)
- 18 Cardio-Pulmonary Emergencies in Children**
10 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 19 Sepsis in Surgery**
10-11 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 22 Current Treatment of Burns**
8 p.m. — Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
- 22 Special Rounds, Surgery**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 23 Breast Cancer**
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 23 Adolescent Medicine**
9-11 a.m. — Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)
- 23 Common Pediatric Orthopedic Problems**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 23 Depression: Reducing Confusion**
1-3 p.m. — VA Hospital, Lyons
(Sponsored by VA Hospital and AMNJ)
- 24 Pediatric Pulmonary Conference**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 24 Preservation of Ischemic Myocardium**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 28 Carcinoma of the Cervix**
12 noon-1 p.m. — Overlook Hospital, Summit
(Sponsored by Overlook Hospital and AMNJ)
- 29 Special Rounds, Medicine**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- Mar.**
- 1 Fluid and Electrolyte Imbalance**
11 a.m. — Greystone Park Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
- 2 Infertility**
1 p.m. — Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)
- 2 Fluid and Electrolyte Imbalance**
11:30 a.m. — Rahway Hospital
(Sponsored by AMNJ and AAFP)
- 2 Coagulopathies and Dysproteinemia: Multiple Myeloma and Waldenstroms**
9-11 a.m. — Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)
- 2 Child Health**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 2 Special Rounds, Pathology**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)

- 2 **Selected Topics in Gastroenterology**
8-10 p.m. — Valley Hospital, Ridgewood
(Sponsored by N.J. Gastroenterology Society)
- 2 **Chronic Obstructive Pulmonary Disease**
- 16 **Acute Renal Failure**
- 30 **Bedside Diagnosis of Heart Disease**
10:30-12 noon — Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
- 2 **Drug-Induced Psychosis**
- 16 **Recent Developments in Mental Health Law**
1-2:30 p.m. — New Jersey Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 2 **Infections in Chronic Renal Failure**
9:15-10:15 a.m. — St. Barnabas Medical Center, Livingston
(Sponsored by AMNJ and St. Barnabas Medical Center)
- 2 **Subjective Sense of Time**
3-4:30 p.m. — Fair Oaks Hospital, Summit
(Sponsored by AMNJ and Fair Oaks Hospital)
- 2 **Specialized Techniques in Family Therapy**
9 7:30-9:30 p.m. — Seton Hall University, South Orange
16 (Sponsored by AMNJ and New Jersey Center for
23 Family Studies)
30
- 3 **Topics in Neurosurgery**
10 4-5 p.m. — VA Hospital, East Orange
17 (Sponsored by CMDNJ, VA Hospital and AMNJ)
24
31
- 3 **Diagnosis of Rhinitis**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 3 **Bypass Grafts**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 4 **Renal Transplantation**
8:30 a.m. — United Hospitals of Newark
(Sponsored by AMNJ and AAFP)
- 4 **Community Psychiatry**
1:30-2:30 p.m. — Trenton Psychiatric Hospital
- 11 **Neuroanatomy and Neuropathology**
2:45-3:45 p.m. — Trenton Psychiatric Hospital
- 18 **Clinical Neurology**
4-5 p.m. — Trenton Psychiatric Hospital
(Sponsored by Trenton Psychiatric Hospital)
- 4 **Hospital Ethics Committee — Pro and Con**
8:30-10 p.m. — Bergen Pines County Hospital, Paramus
(Sponsored by Bergen Pines County Hospital, Bergen County Medical Society and AMNJ)
- 4 **Head, Neck, and Jaw Dysfunction**
5 9 a.m.-5:15 p.m. — Holiday Inn — Jetport, Elizabeth
(CMDNJ Office of Continuing Education, Piscataway)
- 4 **Current Therapy of Tuberculosis**
12 noon-1 p.m. — St. Mary's Hospital, Orange
(Sponsored by St. Mary's Hospital and AMNJ)
- 5 **Introduction to Family Systems Theory and Therapy**
10 a.m.-12 noon — Seton Hall University
(Sponsored by N.J. Center for Family Studies and AMNJ)
- 7 **Couples Group Therapy**
- 14 7:00-9:00 p.m. — Various locations
- 21 (Sponsored by AMNJ and New Jersey Center for
28 Family Studies)
- 7 **Immunology**
8 p.m. — Community Memorial Hospital, Toms River
(Sponsored by AMNJ and AAFP)
- 8 **Positive Aspects of Aging**
9-10:30 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 8 **Cortical Steroid Therapy**
8 p.m. — Paul Kimball Hospital, Lakewood
(Sponsored by AMNJ and AAFP)
- 8 **Clinical Endocrinology**
9 p.m. — Bayonne Hospital
(Sponsored by AMNJ and AAFP)
- 8 **Nutrition and Family Medicine**
12 noon — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 9 **Joint Conference**
Coachman Inn, Cranford
(Sponsored by the New Jersey Thoracic Society and New Jersey Chapter American College of Chest Physicians)
- 9 **Obstructive Lung Disease**
1:30 p.m. — Runnells Hospital, Berkeley Heights
(Sponsored by AMNJ and AAFP)
- 9 **Current Chemotherapy, Breast Cancer**
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 9 **Management of Patients in Diabetic Coma**
9-11 a.m. — Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)
- 9 **Disorders of Biliary Tract and Pancreas**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 9 **Special Rounds, Pediatrics**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 10 **Combined Endocrinology Seminar**
- 24 **Thyroid Function**
10:30 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 10 **Perennial Allergic Rhinitis, Vasomotor Rhinitis and Serous Otitis Media**

- 11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 10 **Use and Abuse of Dialysis**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 11 **AAP Spring Meeting**
13 Paradise Island Hotel, Nassau, Bahamas
- 12 **The Family Therapist's Own Family**
13 9 a.m.-4 p.m. — Holiday Inn, East Orange
(Sponsored by AMNJ and New Jersey Center for Family Studies)
- 15 **Breast Cancer**
5:30-6:30 p.m. — St. Mary's Hospital, Orange
(Sponsored by AMNJ and St. Mary's Hospital)
- 15 **Hematology — Diagnosis of Anemia**
12 noon — St. Mary's Hospital, Orange
(Sponsored by AMNJ and AAFP)
- 16 **Bronchial Asthma**
11:30 a.m.-12:30 p.m. — V.A. Hospital, East Orange
(Sponsored by East Orange V.A. Hospital)
- 16 **Physical Medicine in Office Practice**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 16 **Special Rounds, General Surgery and Specialties**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 16 **Thyroid Diseases**
1 p.m. — Trenton Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
- 16 **Current Advances in Cancer Management**
9-11 a.m. — Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)
- 16 **Forensic Psychiatry**
1-2:30 p.m. — Marlboro Psychiatric Hospital
(Sponsored by Marlboro Psychiatric Hospital and AMNJ)
- 16 **Concepts of Success Phobia**
3-4:30 p.m. — Fair Oaks Hospital, Summit
(Sponsored by AMNJ and Fair Oaks Hospital)
- 17 **Drug Therapy of Upper Respiratory Allergy**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 17 **Family Counseling**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 17 **Management of Angina**
5-6:30 p.m. — Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
- 18 **Sodium and Potassium Metabolism**
9-10 a.m. — St. Francis Medical Center, Trenton
(Sponsored by Hahnemann Medical College and AMNJ)
- 18 **Headache**
12 noon — Freehold Area Hospital
(Sponsored by AMNJ and AAFP)
- 18 **Pediatric Endocrinology**
10 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 19 **Vascular Surgery**
10-11 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 21 **Advance in Medicine — 1977**
Cerroamar Hotel, Puerto Rico
(Sponsored by N.J. Academy of Family Physicians)
- 22 **Echo-Cardiography**
8 p.m. — Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
- 22 **Pacemakers**
12 noon — Hospital Center at Orange
(Sponsored by AMNJ and AAFP)
- 23 **Current Radiation Therapy, Breast Cancer**
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 23 **Arthritis**
11:30 a.m. — Rahway
(Sponsored by AMNJ and AAFP)
- 23 **Neurological Diagnosis**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 23 **Special Rounds, Internal Medicine**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 23 **Virology and Interferon**
9-11 a.m. — Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)
- 23 **Cancer and the Nervous System**
1 p.m. — VA Hospital, East Orange
(Sponsored by AMNJ, CMDNJ-New Jersey Medical School and VA Hospital)
- 23 **Ischemic Heart Disease**
9:30 a.m.-4 p.m. — Marriott Hotel, Saddle Brook
(Sponsored by AMNJ and American Heart Association, Bergen County Chapter)
- 24 **Pediatric Pulmonary Conference**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 24 **Marriage Counseling**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)

- 25 Community Psychiatry**
1:30-2:30 p.m. — Trenton Psychiatric Hospital
Psychology
2:45-3:45 p.m. — Trenton Psychiatric Hospital
Forensic Psychiatry
4-5 p.m. — Trenton Psychiatric Hospital
(Sponsored by Trenton Psychiatric Hospital)
- 26 Athletic Injuries**
9 a.m. — Valley Hospital, Ridgewood
(Sponsored by Valley Hospital)
- 29 Child Abuse**
8-10:30 p.m. — Travelodge, Somerset
(Sponsored by American Academy of Child Psychiatry and AMNJ)
- 30 Hepatitis**
3 p.m. — Fair Oaks Hospital, Summit
(Sponsored by AMNJ and AAFP)
- 30 Aortic Valvular Disease**
9-11 a.m. — Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital, and AAFP)
- 30 Respiratory Virus Infections**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 30 Clinical Hematology**
9:30 a.m.-4:30 p.m. — St. Michael's Medical Center, Newark
(Sponsored by AMNJ and St. Michael's Medical Center)
- 31 Diagnosis and Treatment of Headache**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- Apr.**
- 1 Community Psychiatry**
1:30-2:30 p.m. — Trenton Psychiatric Hospital
Psychology
2:45-3:45 p.m. — Trenton Psychiatric Hospital
Forensic Psychiatry
4-5 p.m. — Trenton Psychiatric Hospital
(Sponsored by Trenton Psychiatric Hospital)
- 1 The Hospitalized Child**
- 15 Childhood Rheumatoid Disease**
10 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 1 Hypertension**
12 noon-1 p.m. — St. Mary's Hospital, Orange
(Sponsored by AMNJ and St. Mary's Hospital)
- 1 Proper Use of Antibiotics**
8:30 a.m. — United Hospitals of Newark
(Sponsored by AMNJ and AAFP)
- 4 Depression in Adolescent Girl**
8-10 p.m. — 60 Melrose Place, Montclair
(Sponsored by Essex Psychiatric Seminar and AMNJ)
- 4 Orthopedic Problems**
8 p.m. — Community Memorial Hospital, Toms River
(Sponsored by AMNJ and AAFP)
- 4 The Practice of Couples Group Therapy**
- 11 7-9 p.m. — Various locations**
(Sponsored by AMNJ and N.J. Center for Family Studies)
- 5 Headache**
11 a.m. — Greystone Park Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
- 6 Parkinson's Disease and Related Disorders**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 6 Special Rounds, Pathology**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 6 Selected Topics in Gastroenterology**
8-10 p.m. — St. Michael's Medical Center, Newark
(Sponsored by N J, Gastroenterology Society)
- 6 Chronic Schizophrenia**
1-2:30 p.m. — N.J. Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 6 Obstructive Uropathy**
9:15-10:15 a.m. — St. Barnabas Medical Center, Livingston
(Sponsored by AMNJ and St. Barnabas Medical Center)
- 6 Specialized Techniques in Family Therapy**
7:30-9:30 p.m. — Seton Hall University, S. Orange
(Sponsored by AMNJ and New Jersey Center for Family Studies)
- 7 Neurosurgical Conferences**
- 14 4-5 p.m. — VA Hospital, East Orange**
- 21 (Sponsored by CMDNJ, VA Hospital, East Orange,**
- 28 and AMNJ)**
- 7 Hyperlipedemia**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 9 Fluids and Electrolyte Balance**
10-11 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center & AAFP)
- 10 Intrauterine Growth Retardation**
11 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center & AAFP)
- 12 New Developments in Psychiatry and Law**
9-10:30 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center & AAFP)
- 12 Review and Update of OB/GYN**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)

- 12 **Collagen Disease**
8 p.m. — Paul Kimball Hospital, Lakewood
(Sponsored by AMNJ and AAFP)
- 12 **Echo-Cardiography**
9 p.m. — Bayonne Hospital
(Sponsored by AMNJ and AAFP)
- 13 **Proper Use of Blood Gases**
1 p.m. — Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)
- 13 **Current Surgical Techniques, Breast Cancer**
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 13 **Headache**
11:30 a.m. — Rahway Hospital
(Sponsored by AMNJ and AAFP)
- 13 **Cardiac Complications of Antidepressant Drugs and Major Tranquilizers**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 13 **Special Rounds, Pediatrics**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 13 **Therapy of Ambulatory Patients Who Have Had Psychosis**
1-2:30 p.m. — Marlboro Psychiatric Hospital
(Sponsored by Marlboro Psychiatric Hospital and AMNJ)
- 13 **Update on Collagen Disease**
10:30-12 noon — Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
- 14 **Review Symposium — Malpractice**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 14 **Drug Allergy**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 14 **Inflammatory Bowel Disease**
- 28 **Multiple Sclerosis**
10:30 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 15 **Community Psychiatry**
- 22 **1:30-2:30 p.m. — Trenton Psychiatric Hospital**
Mental Deficiency
2:45-3:45 p.m. — Trenton Psychiatric Hospital
Forensic Psychiatry
4-5 p.m. — Trenton Psychiatric Hospital
(Sponsored by Trenton Psychiatric Hospital)
- 15 **Scanning**
12 noon — Freehold Area Hospital
(Sponsored by AMNJ and AAFP)
- 17 **Seminar in Medical Humanism**
8:30-10 p.m. — Bergen Pines County Hospital, Paramus
(Sponsored by Bergen Pines County Hospital, Bergen County Medical Society and AMNJ)
- 19 **Cardiac Arrhythmias**
12 noon — St. Mary's Hospital, Orange
(Sponsored by AMNJ and AAFP)
- 19 **Recent Advances in Cardiology**
8:30-9:30 p.m. — Irvington General Hospital
(Sponsored by Irvington General Hospital and AMNJ)
- 20 **Child Abuse and Neglect**
1 p.m. — Trenton Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
- 20 **Pulmonary Pathology in Connective Tissue Disease**
11:30 a.m.-12:30 p.m. — V.A. Hospital, East Orange
(Sponsored by V.A. Hospital, East Orange)
- 20 **New Cardiac Drugs**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 20 **Special Rounds, General Surgery and Specialties**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 20 **New Frontiers in Psychiatry**
1-2:30 p.m. — N.J. Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 21 **Insect Allergy**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 21 **Carcinoma of Lung**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 21 **Diagnostic Approaches to the Ischemic Lower Extremity**
5-6:30 p.m. — Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
- 26 **Endotoxic Shock**
12 noon — Hospital Center at Orange
(Sponsored by AMNJ and AAFP)
- 26 **Gastrointestinal Bleeding**
8 p.m. — Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
- 27 **Emotional Crises in Practice**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 27 **Special Rounds, Internal Medicine**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)

- 27 Neonatal Infections**
10:30 a.m.-12 noon—Passaic General Hospital
(*Hahnemann Medical College and AAFP*)
- 27 Lung Cancer**
1:30-3 p.m.—St. Mary's Hospital, Passaic
(*Sponsored by AMNJ and AAFP*)
- 28 Pediatric Pulmonary Conference and Case Presentations**
11 a.m.-12 noon—United Hospitals of Newark
(*Sponsored by Children's Hospital of Newark and CMDNJ*)
- 28 Use and Abuse of Diuretics**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(*Sponsored by Kennedy Medical Center*)
- May**
- 2 Emergency Medicine**
8 p.m.—Community Memorial Hospital, Toms River
(*Sponsored by AMNJ and AAFP*)
- 2 A Learning-Disabled Adolescent**
8-10 p.m.—1046 South Orange Avenue, Short Hills
(*Sponsored by Essex Psychiatric Seminar and AMNJ*)
- 3 Cerebral-Vascular Disease**
11 a.m.—Greystone Park Psychiatric Hospital
(*Sponsored by AMNJ and AAFP*)
- 4 Thanatology**
1 p.m.—Christ Hospital, Jersey City
(*Sponsored by AMNJ and AAFP*)
- 4 Sports Medicine**
11:30 a.m.—Rahway Hospital
(*Sponsored by AMNJ and AAFP*)
- 4 Low Back Pain**
9-11 a.m.—Middlesex General Hospital
(*Sponsored by Middlesex General Hospital and AAFP*)
- 4 Glomerulonephritis**
9:15-10:15 a.m.—St. Barnabas Medical Center, Livingston
(*Sponsored by AMNJ and St. Barnabas Medical Center*)
- 4 Special Rounds, Pathology**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(*Sponsored by St. Mary's Hospital*)
- 4 Psychiatric Rehabilitation**
1-2:30 p.m.—N.J. Medical School, Newark
(*Sponsored by CMDNJ and AMNJ*)
- 5 Neurosurgical Conferences**
12 4-5 p.m.—VA Hospital, East Orange
(*Sponsored by CMDNJ, VA Hospital, East Orange, and AMNJ*)
- 5 Veterinary Allergy**
11 a.m.-12 noon—United Hospitals of Newark
(*Sponsored by Children's Hospital of Newark and CMDNJ*)
- 5 Fluid and Electrolyte Balance**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(*Sponsored by Kennedy Medical Center*)
- 5 Seminar in Medical Humanism**
8:30-10 p.m.—Bergen Pines County Hospital, Paramus
(*Sponsored by Bergen Pines County Hospital, Bergen County Medical Society, and AMNJ*)
- 6 Proper Use of Blood Gases**
8:30 a.m.—United Hospitals of Newark
(*Sponsored by AMNJ and AAFP*)
- 6 White Cell Disorders**
10 a.m.—Monmouth Medical Center
(*Sponsored by Monmouth Medical Center and AAFP*)
- 10 Leukemia**
8 p.m.—Paul Kimball Hospital, Lakewood
(*Sponsored by AMNJ and AAFP*)
- 10 Plastic Surgery**
9 p.m.—Bayonne Hospital
(*Sponsored by AMNJ and AAFP*)
- 10 What's New in Allergy?**
12 noon—Monmouth Medical Center
(*Sponsored by Monmouth Medical Center and AAFP*)
- 11 Academy of Medicine Annual Awards Dinner**
6 p.m.—Chanticleer, Millburn
- 11 Thanatology**
1:30 p.m.—Runnells Hospital, Berkeley Heights
(*Sponsored by AMNJ and AAFP*)
- 11 Obstructive Lung Disease**
1:30-3 p.m.—St. Mary's Hospital, Passaic
(*Sponsored by AMNJ and AAFP*)
- 11 Sputum Examination**
11:30 a.m.-12:30 p.m.—V.A. Hospital, East Orange
(*Sponsored by East Orange V.A. Hospital*)
- 11 Patient with Advanced Cancer**
9-11 a.m.—Middlesex General Hospital
(*Sponsored by Middlesex General Hospital and AAFP*)
- 11 Special Rounds, Pediatrics**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(*Sponsored by St. Mary's Hospital*)
- 11 Role of the Therapist in Psychotherapy**
1-2:30 p.m.—Marlboro Psychiatric Hospital
(*Sponsored by Marlboro Psychiatric Hospital and AMNJ*)
- 11 Clinical Shock**
10:30-12 noon—Passaic General Hospital
(*Sponsored by Hahnemann Medical College and AAFP*)
- 12 Marital Counseling and Gender Identity**
11 a.m.—Monmouth Medical Center
(*Sponsored by Monmouth Medical Center and AAFP*)

- 12 **Management of Diabetes**
 - 26 **Hyperalimentation**
10:30 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
 - 12 **Urticaria and Angioedema**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
 - 12 **Immunology and Asthma**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
 - 13 **Recent Advances in Pediatric Cardiac Surgery**
7:30-10 p.m. — Mayfair Farms, West Orange
(N.J. Society of Thoracic Surgeons and AMNJ)
 - 14 **MSNJ Annual Meeting**
 - 17 **Haddon Hall, Atlantic City**
 - 16 **Diagnosis and Management of Non-Hodgkins Lymphoma**
12 noon-1 p.m. — Overlook Hospital, Summit
(Sponsored by Overlook Hospital and AMNJ)
 - 17 **Tuberculosis**
12 noon — St. Mary's Hospital, Orange
(Sponsored by AMNJ and AAFP)
 - 18 **What's New in Office Gynecology?**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
 - 18 **Special Rounds, General Surgery and Specialties**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
 - 18 **Pharmacology of Sleep**
1-2:30 p.m. — N.J. Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
 - 19 **Atopic Dermatitis**
11 a.m.-12 noon — United Hospitals of Newark
(Children's Hospital of Newark and CMDNJ)
 - 19 **Outpatient Management of Pulmonary Tuberculosis**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
 - 19 **Cellular Engineering in Medicine**
5-6:30 p.m. — Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
 - 20 **Diabetes**
12 noon — Freehold Area Hospital
(Sponsored by AMNJ and AAFP)
 - 20 **Duodenal-Pancreatic Catheterization**
9-10 a.m. — St. Francis Hospital, Trenton
(Sponsored by Hahnemann Medical College and AAFP)
 - 24 **Thanatology**
12 noon — Hospital Center at Orange
(Sponsored by AMNJ and AAFP)
 - 24 **Bleeding Diseases**
8 p.m. — Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
 - 25 **Proper Use of Blood Gases**
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
 - 25 **Headache**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
 - 25 **Special Rounds, Internal Medicine**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
 - 25 **Pneumonia: Viral and Bacterial**
10:30-12 noon — Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
 - 26 **Pediatric Pulmonary Conference and Case Presentations**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
 - 26 **Preventive Measures in Heart Disease**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- June**
- 1 **Tuberculosis — Outpatient Treatment**
1 p.m. — Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)
 - 1 **Special Rounds, Pathology**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
 - 2 **Neurosurgical Conferences**
 - 9 4-5 p.m. — VA Hospital, East Orange
(Sponsored by CMDNJ, VA Hospital, East Orange, and AMNJ)
 - 16 23 30
 - 2 **Pulmonary Function Tests**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
 - 3 **Psychiatry-Medical Surgical Emergencies**
8:30 a.m. — United Hospitals of Newark
(Sponsored by AMNJ and AAFP)
 - 6 **Non-Specific Urethritis**
8 p.m. — Community Memorial Hospital, Toms River
(Sponsored by AMNJ and AAFP)
 - 7 **Arthritis**
11 a.m. — Greystone Park Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
 - 8 **Special Rounds, Pediatrics**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)

- 8 Endotoxic Shock**
1:30-3 p.m.—St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 8 Management of Arrhythmias**
10:30-12 noon—Passaic General Hospital
(Hahnemann Medical College and AAFP)
- 8 Annual Meeting New Jersey Thoracic Society**
CMDNJ-Rutgers Medical School, Piscataway
(Sponsored by New Jersey Thoracic Society)
- 8 Evolution of the State Hospital Psychiatrist**
1:00-2:30 p.m.—Marlboro Psychiatric Hospital
(Sponsored by Marlboro Psychiatric Hospital and AMNJ)
- 9 Proper Use of Blood Gas**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 14 Endocrine Changes in Menopause**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 14 Pacemakers**
8 p.m.—Paul Kimball Hospital, Lakewood
(Sponsored by AMNJ and AAFP)
- 14 Allergy**
9 p.m.—Bayonne Hospital
(Sponsored by AMNJ and AAFP)
- 15 Adult Respiratory Distress Syndrome**
11:30 a.m.-12:30 p.m.—V.A. Hospital, East Orange
(Sponsored by East Orange V.A. Hospital)
- 15 Special Rounds, General Surgery and Specialties**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 15 Transcultural Psychiatry**
1-2:30 p.m.—New Jersey Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 16 Duodenal Ulcer Disease**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 16 Current Concepts of Addiction**
5-6:30 p.m.—Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
- 17 Thyroid Diseases**
12 noon—Freehold Area Hospital
(Sponsored by AMNJ and AAFP)
- 20 Status Asthmaticus**
10 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 21 Hypertension**
12 noon—St. Mary's Hospital, Orange
(Sponsored by AMNJ and AAFP)
- 22 Arterial Blood Gases**
10:30-12 noon—Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
- 22 Hemorrhagic Shock**
1:30-3 p.m.—St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 22 Special Rounds, Internal Medicine**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 23 Psychosomia—A Medical Diagnosis**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 28 Outpatient Management of T.B.**
8 p.m.—Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)

211th Annual Meeting

May 14-17

Chalfonte—Haddon Hall
Atlantic City

The Old Helping Hand Organization

Many of the younger doctors do not know that there exists in our state a unique helping hand organization, known as the Society for the Relief of the Widows and Orphans of Medical Men in New Jersey. This organization provides immediate

financial assistance to the dependents of a deceased member. It lends money without interest to assist widows and orphans of doctors who have known adversity. For details, write to the Society at P.O. Box 102, Hopewell, New Jersey 08525.

OBITUARIES

Dr. Kenneth L. Athey

The former chief of surgery at West Jersey Hospital, Kenneth L. Athey, M.D., died on November 10, 1976, after a long illness. Born in 1904 and a graduate of Hahnemann Medical College in 1928, Dr. Athey took his internship at West Jersey Hospital and was on its professional staff for 44 years, serving as chief of surgery from 1953 until 1969 when he retired. He was a Fellow of the American College of Surgeons and of the International College of Surgeons. Dr. Athey was affiliated also with the department of surgery at Lakeland General Hospital. During World War II he served for four years in field hospitals in Africa and Italy. He was active in the Masonic Order and was a member of the American Museum of Natural History and of the Smithsonian Associates.

Dr. Roberto L. Daubar

Roberto L. Daubar, M.D., a member from our Hudson County component, died suddenly on September 3, 1976. A native of Cuba, Dr. Daubar earned his medical degree from the University of Havana in 1946 and, in association with the University and Curie Hospitals, practiced otolaryngology there until 1962. He emigrated to the United States and took graduate work at St. Barnabas Medical Center in Livingston, Bellevue Hospital in New York, and New York

University Medical Center. Dr. Daubar received his New Jersey license in 1968 and began a practice of his specialty in Hoboken, later moving to Union City, and more recently to Guttenberg. Dr. Daubar had staff appointments at St. Mary's Hospital in Hoboken and Christ Hospital in Jersey City. He was 58 years old at the time of his death.

Dr. Allan B. Crunden, Jr.

On October 10, 1976, Allan B. Crunden, Jr., M.D., died in the Veterans Administration Hospital, Lyons, following a myocardial infarction. A native of Chicago, Dr. Crunden earned his medical degree from Temple University School of Medicine in 1938 and came to Jersey City Medical Center for internship. He took residencies in obstetrics and gynecology at the Margaret Hague Hospital in Jersey City and at Chicago Lying-in Hospital, becoming board certified in his chosen specialty. He was a Fellow of the American College of Obstetricians and Gynecologists and of the American College of Surgeons. He had been affiliated with Alexander Linn Hospital in Sussex, the West Hudson Hospital in Kearny, and Mountainside Hospital in Montclair, where he had been director of the department of obstetrics and gynecology. During World War II Dr. Crunden was on active duty with the U.S. Air Force for four years, earning the Legion of Merit Award and the Secretary of War Commendation Ribbon with three Oakleaf Clusters. He had had offices in Cedar Grove and Montclair and retired in early 1976 for reasons of

health. He was 64 years old at the time of his death.

Dr. Frank S. Forte

One of Essex County's senior members, Frank S. Forte, M.D., died on November 18, 1976, in East Orange Veterans Hospital after a prolonged illness. Born in 1898 and graduated from Temple University School of Medicine in 1925, Dr. Forte pursued graduate work in proctology at Mt. Sinai and Postgraduate Hospitals in New York, becoming board certified in that field. He was a Fellow of the American College of Surgeons and of the International College of Surgeons, and held membership in the American Proctologic Society, the New Jersey Proctologic Society (of which he was a founder and past-president), and the prestigious New Jersey Society of Surgeons. Dr. Forte had been associated with St. Michael's Hospital in Newark where he was president of the medical staff and chief of the department of proctology, and with Presbyterian and Martland Hospitals in Newark, Clara Maass Hospital in Belleville, and the Essex County Sanatorium at Verona. He also held a teaching post at Seton Hall College of Medicine and became an assistant dean in charge of graduate education. Dr. Forte was active in organized medicine, having been president of the Essex County Medical Society and a member and chairman of MSNJ's Council on Public Relations.

Dr. John E. Maher

One of Monmouth County's senior members, John E. Maher, M.D., died at his home on October 28, 1976. Born in 1892, in Perth Amboy, Dr. Maher was graduated from the University of Maryland School of Medicine in 1914 and took his internship and surgical residency at the Monmouth Medical Center in Long Branch. He stayed in that community to establish a practice and was on the surgical staff of the Monmouth Medical Center, ultimately becoming director of that department. He also had been affiliated with the Jersey Shore Medical Center in Neptune. Dr. Maher was a past-president of the Monmouth County Medical Society, a Fellow of the American College of Surgeons, and a member of the Society of Abdominal Surgeons.

Dr. Harry J. McLeod

Word has just been received of the death on September 13, 1976, of Harry J. McLeod, M.D., of Englewood, a member from our Bergen County component. Born in 1900 and a native of Canada, Dr. McLeod was graduated from Queen's University Medical School in Kingston, Ontario, and came to New Jersey the following year to settle in Tenaflly. He had been associated with the department of anesthesiology at Englewood Hospital since 1929, becoming chief of that section. He was a Fellow of the International College of Anesthesiologists.

Dr. Herbert L. Moskowitz

At the untimely age of 53, Herbert L. Moskowitz, M.D., died at his home on November 11, 1976. Born in New York, Dr. Moskowitz was graduated from Tulane University School of Medicine in 1946 and pursued graduate work in ophthalmology, becoming a diplomate of the American Board of Ophthalmology and a Fellow of the American Academy of Ophthalmology and Otolaryngology. He was chief of service at the Newark Eye and Ear Infirmary and affiliated also at Overlook Hospital in Summit and St. Barnabas Medical Center in Livingston.

Dr. Steven I. Okin

On October 5, 1976, Steven I. Okin, M.D., died at his home in Delray Beach, Florida. He was graduated from Columbia University's College of Physicians and Surgeons in 1923 and pursued a residency in pediatrics at New York Postgraduate Medical School, becoming board certified in that specialty. Formerly from Passaic, he had been on the staff at St. Mary's Hospital (ultimately being named director of pediatric service) until retirement in 1968. He remained active for a time as pediatrician in the retarded child clinic at the hospital. He had been reporter, secretary, vice-president and president of his county medical society, the latter in 1950. Dr. Okin had been both secretary and chairman of MSNJ's Section on Pediatrics and chairman of the Committee on Child Health. He was a recipient of MSNJ's Golden Merit Award in 1973. He was also a trustee of the Academy of Medicine of New Jersey. Dr. Okin was 77 years old at the time of his death.

Dr. Wilbert Sachs

One of Passaic County's senior members, Wilbert Sachs, M.D., formerly of Passaic, died on October 9, 1976, in Coral Gables, Florida, where he had been living since retirement. Born at the turn of the century, Dr. Sachs earned his medical degree from Western Reserve in 1925 and took his internship and residency at Bellevue and Post Graduate Hospitals in New York. He was a diplomate of the American Board of Dermatology and Syphilology and held teaching appointments in New York at the Skin and Cancer Hospital, Cornell Medical College, Polyclinic Medical School, and New York Medical College. He had staff appointments at Jersey City Medical Center, and at Margaret Hague, North Hudson, Hasbrouck Heights, and Passaic General Hospitals. Dr. Sachs was a Fellow of the American Academy of Dermatology.

Dr. Ruth M. Schriever

Ruth M. Schriever, M.D., a member of our Ocean County component, died on September 28, 1976, after a long illness. Born in Connecticut, Dr. Schriever earned her medical degree from the University of Michigan School of

Medicine in 1933. Following internship she pursued a career in anesthesiology and came to New Jersey to settle in Ocean County. Dr. Schriever was attending anesthesiologist at the Point Pleasant Hospital for many years, retiring in 1970. She was a member of the American and New Jersey Society of Anesthesiologists.

Dr. Andrew Silverman

A member of our Essex County component, Andrew Silverman, M.D., died at St. Barnabas Medical Center on November 10, 1976. Dr. Silverman, who received his medical degree from the University of Geneva in 1937, practiced obstetrics and gynecology in Short Hills. He did graduate work at St. Vincent's Hospital in Chicago. He was board certified in his chosen field and was a Fellow of the American College of Obstetricians and Gynecologists. He was chief of obstetrics at Beth Israel Medical Center, a member of the associate staff at St. Barnabas Medical Center in Livingston, and also had staff appointments at St. Michael's and Martland Hospitals in Newark. Dr. Silverman was clinical professor in both gynecology and obstetrics at New Jersey Medical School, CMDNJ. He was 64 years old at the time of his death.

BOOK REVIEW

Alcoholism. Ralph E. Tarter and A. Arthur Sugerman (Editors). Reading, Massachusetts, Addison-Wesley Publishing Co., 1976. Pp. 857. (\$13.50—paperback; \$27.50—cloth)

Since 1970, alcoholologists have been fortunate in the publication of a number of volumes which, like this one, collate and summarize research and clinical findings in a number of specialized areas and which present a progress report of the current state of knowledge about alcoholism. Many eminent investigators contributed to this text, subtitled, "Interdisciplinary Approaches to an Enduring Problem." Their chapters are scholarly, well researched and referenced, and individually they reflect the range of interdisciplinary approaches. What I missed were attempts to define the interfaces between them and to elucidate the crucial areas where their respective knowledges interdigitate. I believe that these kinds of interrelationships between disciplines, rather than new "break-through" research data, are

what we need to understand better the enigmas of etiology, treatment, and, ultimately, prevention of alcoholism, the "enduring" and increasing problem.

This very ambitious volume is in three parts. The first is introductory and gives the reader an excellent orientation to—and historical perspective on—alcoholism. The second is called "Processes in Alcoholism" and includes separate chapters on such disparate topics as hepatic, neurological, psychiatric, psychological, sleep, genetic, psychophysiological, social, cultural, and sexual factors in alcoholism. For readers interested in a special topic, the relevant chapter is a good introduction and overview. I feel, however, that the "processes" covered perhaps run too wide a gamut, but they certainly highlight the fact that alcoholism is a multidisciplinary field. The final section focuses upon treatment approaches in alcoholism: individual, group and family therapies, psychopharmacology, behavioral approaches, AA, and community programs.

In the preface, the editors state, "What emerges from a reading of this volume is that alcoholism is not simply a disease but an array of disorders of similar topography." This book attests to the fact that investigators in a host of disciplines are searching actively for these differentiating similarities among the alcoholisms. Earl X. Freed, Ph.D.

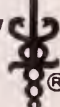
Breast self-examination:

KEY ROLE OF THE PHYSICIAN

item:	Breast cancer is a major concern of American women, according to a recent Gallup study conducted for the American Cancer Society.
item:	Although aware that early discovery improves the chances of cure, and that BSE can lead to early discovery, <i>fewer than 1 in 5</i> women practice BSE, and <i>only half</i> have an annual breast examination by a physician.
item:	Only 35% of all women polled reported that a <i>physician</i> had ever raised the subject of breast self-examination, and only 24% had received instruction from the physician on how to do it. Even among women who regularly see a gynecologist, only 34% had been instructed on BSE.
item:	<i>But</i> , among women who received personal instruction from their physicians, the overwhelming majority (92%) practiced BSE during the preceding year.

The Gallup study revealed that, far more important than increasing awareness of breast self-examination, is the problem of inducing women to practice it regularly. The physician plays a key role in this—by teaching women the correct technique, and instilling in them the confidence that will assure their continued practice of BSE. The American Cancer Society gives

major emphasis to breast cancer through research and a vast array of public educational materials, designed to give women life-saving information about the disease. Our latest approach is via a pioneering television film starring Jennifer O'Neill, "Breast Cancer: Where We Are." Where we *will* be in a few years will certainly hinge on our joint efforts.

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I. Gielchinsky, M.D., et al.

Parathyroid Carcinoma
*G. O. Halsted, M.D. and
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Health Education in
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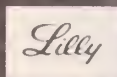


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EDITORIALS

John Joseph Bedrick 1910-1976

Doctor John Joseph Bedrick, 173rd President of The Medical Society of New Jersey, died suddenly on December 20, mourned by all who knew him.

A native of Bayonne, where he received his primary and secondary education, Doctor Bedrick was awarded both his baccalaureate and doctoral degrees by Columbia University. He served a surgical internship at New York City Hospital on Welfare Island and followed it with a residency in pathology there. Subsequently he took residencies in surgery and surgical pathology. Having entered private practice in Bayonne just prior to the holocaust of Pearl Harbor, he immediately went into military service and spent the next five years on active duty. Upon completion of his tour of duty with the rank of colonel he reopened his office in Bayonne, where he continued his practice as a surgeon up to the time of his death.

Doctor Bedrick was a former president of both the Bayonne and Hudson County Medical Societies and chief medical examiner of Hudson County. Besides his services to MSNJ as President and incumbent of the sequential chairs leading to that office, Doctor Bedrick was for a period a member of the Board of Trustees of the Society.

Doctor Bedrick had the honor to serve as president during the year of the Society's Bicentennial. Many will remember him as the dynamic leader of the diversified and colorful activities that in that year took place. All who attended the impressive presidential dinner which climaxed the bicentennial year will recall him as the central figure in the group of dais-dignitaries who, with arms and hearts linked, joined the standing audience in singing "Auld Lang Syne."

Genial, generous, compassionate, and wholeheartedly devoted to the causes and people whom he served, quick to laughter and not immune to tears, John Bedrick assuredly will not "be forgot" . . . as long as love remembers.

R. I. Nevin

The Swine Influenza Vaccine Lesson

Like a pregnancy predestined to abortion, the national swine flu immunization program was conceived improperly, developed with difficulty, and terminated abruptly, to the satisfaction of no one. A high level state health official indicated that the decision to attempt this expensive public health endeavor was based on "emotions and politics," which means that good public health practice and fiscal responsibility were far down on the list of priorities. Even if one grants that the retrospectroscope always sees more clearly, the inevitable postmortem critique reveals disturbing facts which ring true. One cannot fault the pharmaceutical industry, in this day of unreasonable governmental pressure, for its unwillingness to put millions of dollars of its stockholders' money on the line to manufacture a new vaccine for which no prior preparations had been made and whose use on a voluntary, pay-as-you-go basis would have resulted in great financial losses. Nor can any criticize their reluctance to accept the responsibility of medical-legal action based on real or fancied injury by a vaccine program into which they were pushed.

In our State the health officials made almost miniscule gestures toward the Medical Society and failed to seek advice, consent, or cooperation. The individual physicians were kept largely in the dark as to the details of the immunization sites, dates, and local programs, and only at the last moment were physicians asked to volunteer to "stand by" while state technicians gave the spray injections. Patients asked their doctors for advice about the injections of swine flu vaccine—especially after the early deaths in Pennsylvania, but the professionals had no

facts on which to base an opinion—only newspaper reports. An FDA Drug Bulletin* almost reluctantly included physicians in the program, and did so with a threat and a tweak of their consciences: "Physicians may wish to administer the vaccine as a public service, and thereby be protected under a recently established government insurance program. To be covered by the 'Swine Flu Act' physicians must provide every patient who receives the influenza vaccine with literature explaining the benefits and risks."

Of course, no significant quantities of vaccine were made available for administration in the physician's office.

At the termination of the program public health officials were quoted in the newspapers as fully having been aware that there would be serious, even fatal complications, including the unpredictable Guillain-Barré Syndrome. Whether these allegations were true or not, why did the government officials not invoke the principles of "informed consent" to the extent that they demand of practitioners? They warned persons who were allergic to eggs to avoid the vaccine; they spoke of fever, local myalgia, malaise, and such "acceptable" side effects, but not of paralysis and death. There was no one-to-one explanation—only a printed notice which each recipient was handed. Could they have believed that the elderly, the illiterate, the unsophisticated, in fact any of the recipients, really understood the warnings?

Health cost-control and cost-benefit analyses are the popular regulatory concepts of the day. How can any official justify the costs of this ill-conceived, poorly executed national program which will damage the reputation of public health agencies and may interfere with all future massive immunization programs for as long as a generation? The oft-quoted figure—\$135 million—is only a fraction of the true cost. It does not include the dollar equivalent of the thousands of hours of professional and volunteer time, the actual dollar costs of the preliminary trials, the State logistical and pub-

licity efforts, nor the costs of travel, epidemiological and laboratory support in the investigation of Pennsylvania deaths and of the victims of the Guillain-Barré Syndrome. One might guess that the total cost to the nation was closer to \$200 million.

How can we have a true prospective of such massive expenditures? New Jersey, now known as "The Cancer State" to some, has a fine yardstick for comparison. Our Senator Harrison A. Williams, Jr. and others recently developed a federal law which, among other provisions, will make available a sum of money to establish regional centers to deal with health and safety problems in the workplace. This law clearly will relate to industrial carcinogenesis, as well as to other urgent, ongoing threats to the well-being of workers. Isn't it shocking to realize that the initial funding for the entire nation for this crucial health measure is only \$10 million?

Before government representatives—especially those from the health agencies—cast further stones, they first should look in the mirror. It seems that some of the stones are turning into boomerangs. The Medical Society of New Jersey and the individual physicians of this State have a right and a responsibility to participate in those health endeavors which involve our patients and our money, and which require our knowledge. But, participation means a true partnership with a voice at the onset, the right to debate questionable issues and access to complete factual information, well in advance, so that we can advise our patients properly and wisely. A.K.

From Our Patients We Shall Learn

Self-instruction seems to be the wave of the present and the future in medicine. Educators and educational psychologists are busy preparing courses and evaluation technology for all levels of medical professionals—from beginning medical students to seasoned practitioners

*FDA Drug Bulletin Aug-Oct, 1976, p. 31.

with years of experience and board certification. An example of material for the latter group is the American College of Physicians' Self-Learning Series. These programs are a good source of information and may provide specific new knowledge which will improve one's practice abilities. However, they do have one handicap—they tend to lack instant relevance. Although the topics selected are important, it would be a rare instance when one could walk away from his microfiche reader and revise his patient's hospital orders as a result of a course.

There is a way to do this, however. Each *patient* we treat should represent a self-instructional course. We should evaluate his problems thoroughly, consult our colleagues (using both the official and "curbstone" variety of consultation), and review textbooks, journals, and other sources of didactic information. The ready availability of literature searches via library computer services places our fingertips on the most exotic information, which would have taken weeks to obtain "in the olden days."

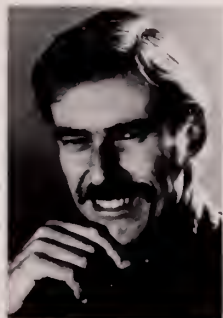
How important can this approach be to everyday practice? The following is an abbreviated list of problems encountered in clinical practice in the recent past by this writer:

- Mucormycosis
- Malignant otitis externa
- Retroperitoneal fibrosis (due to methysergide maleate)
- Parathyroid adenoma
- Peripheral neuropathy with amyotrophy
- Warthin's tumor of the parotid
- Fulminant HS Ag positive hepatitis with renal failure
- Disseminated malignant histiocytosis
- Squamous cell carcinoma associated with chronic osteomyelitis of the lower extremity
- Hyperosmolar nonketotic coma
- Gastroparesis diabeticorum
- Systemic sclerosis with esophageal stenosis

Careful study of these patients and their problems surely would provide an experience in self-instruction which would be relevant, inexpensive, and readily available. Although this procedure is regularly used in CPC's and conferences for interesting, unusual, or complex disorders uncovered among our in-hospital patients, the same can be done with challenging ambulatory patients.

Each unusual office-problem patient should be analyzed and the data brought before hospital conferences for review. In every case, the process of study as well as the outcome of the educational procedure—a self-instructional happening—can enhance the physician's knowledge. In this way, continuing medical *self-education* can be a daily experience for all clinicians.

A.K.



Cover Photo

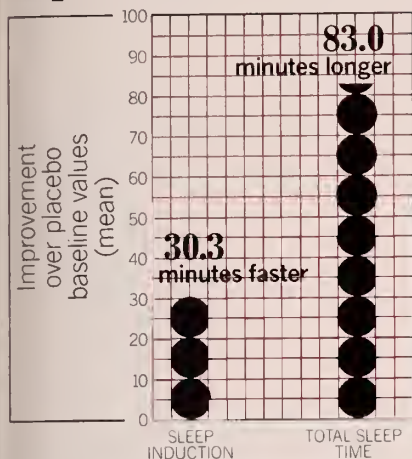
The photograph on the cover is by M. Jay Goodkind, M.D., a practicing cardiologist at Mercer Medical Center, Trenton. He has been a serious photographer for many years and has had one-man shows at the Kenmore Galleries, the Container Corporation of America, and in private galleries in Mahopach, New York.

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Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows: **Indications:** Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Several studies of minor tranquilizers (chlordiazepoxide, diazepam, and meprobamate) suggest increased risk of congenital malformations during the first trimester of pregnancy. Dalmane, a benzodiazepine, has not been studied adequately to determine whether it may be associated with such an increased risk. Because use of these drugs is rarely a matter of urgency, their use during this period should almost always be avoided. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, limit initial dosage to 15 mg to preclude oversedation, dizziness and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in patients who are severely

depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, paradoxical reactions, e.g., excitement, stimulation and hyperactivity, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase.

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REFERENCES:

1. Frost JD Jr: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ
2. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ
3. Robinson DS, Amidon EL: Interaction of benzodiazepines with warfarin in man, in *The Benzodiazepines*, edited by Garattini S, Mussini E, Randall LO. New York, Raven Press, 1973, p. 641

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ORIGINAL ARTICLES

The preceptorship is a form of apprenticeship medical teaching which has re-emerged in family medicine. The preceptor program of the Department of Family Medicine at CMDNJ-Rutgers Medical School represents a graduated approach to primary care teaching which can be used with freshman or senior students. The objectives, organization, and evaluation of the preceptor program are presented along with a discussion of the educational and practical advantages and disadvantages for the experienced physician.

Family Medicine Preceptor Program*

**Samuel Warburton, Jr., M.D.,
Frank Snope, M.D., and
Leon Silverman, M.D./Piscataway**

The apprenticeship is one of the oldest medical teaching methods. Hippocrates and other early physicians taught in this fashion. Much of American medicine, despite the previous development of European universities, was learned on the frontier in such a one-to-one setting. Cupping and bleeding, preparation and application of drugs, setting fractures, treatment of arrow and gunshot wounds, as well as house and stable boy chores were all included in the education of the indentured apprentice.¹ But as medicine became a more exacting occupation, it became apparent that a student could not receive a complete medical education from one tutor. This became even more apparent with the issuance of the Flexner Report in 1910 which laid the basis for the present scientific approach to medical education to assure physician competence. An apprenticeship education experience was believed to be too difficult to control from a qualitative standpoint. However, the abandonment of the apprenticeship was short-lived. In 1926, the University of Wisconsin began a preceptorship program for students between the second and third years of medical school.²

Family medicine emerged as a specialty in 1969 and has been at the forefront in a number of areas including recertification, integration of behavioral science with organic disease, and definition of the primary care movement. Family medicine also has taken a leadership position in returning the preceptorship to our medical schools around the country.

The Department of Family Medicine at CMDNJ-Rutgers Medical School was established in 1973 and is the only department at the school whose entire responsibility is the teaching of primary care. The Family Medicine Preceptorship Program represents a graduated approach to primary care teaching. The purpose of this paper is to describe the objectives, the organization and evaluation of our preceptorship programs and to familiarize physicians in New Jersey with these efforts.

Funded by the U.S. Department of Health, Education and Welfare, the preceptorships are the foundation of the Department's teaching activities. One of their intended outcomes is to correct the specialty and geographic maldistribution of physicians. The need is obvious as detailed studies of physician manpower in New Jersey³ have shown that the State as a whole and the majority of its component counties are "family-physician poor." If the ideal ratio of one family physician per 2500 population is used (the ratio considered ideal in Great Britain), then New Jersey's current ratio of one family doctor per 5159 population is 50 percent of the ideal. Only Cape May and Hunterdon Counties approach the ideal family-physician manpower goal. The physician manpower ratios in the counties range from 1 per 2600 in Hunterdon County to 1 per 10,000 in Sussex County.

*From the Department of Family Medicine at CMDNJ-Rutgers Medical School. Dr. Warburton is Assistant Professor, Dr. Snope is Associate Professor and Chairman of the Department and Dr. Silverman is Clinical Assistant Professor. The preceptorship programs are supported in part through HEW Grant #1 DO8 PE 08075-01 and the New Jersey Academy of Family Physicians.

Preceptorship programs seek to change these ratios by providing the student with an opportunity to observe and participate in practices in rural or underserved areas.

The Programs

The Family Medicine Preceptorship Program throughout the first, second, and fourth years of CMDNJ-Rutgers Medical School allows the student an opportunity initially to observe a family physician and then actually participate, under supervision, in a family practice. For the first-year student, the doctor-patient relationship and the interaction of the family and illness are emphasized using a longitudinal preceptorship. At the end of the second year, the student is given an opportunity to use skills developed in physical diagnosis and interviewing courses as he begins to recognize and manage the range of problems commonly encountered in family medicine. Finally, in the fourth year, all students are expected to apply the principles mentioned above as well as to manage undifferentiated

problems and to utilize community resources. Details concerning the structure of these courses are summarized in Table 1.

How, Where and What We Teach

Goals and objectives for the preceptorships are listed in Table 2. The first-year student learns by directed observation. In the second year, the student is given limited responsibility for patient care under close supervision, while in the fourth year the student functions more independently but always with appropriate guidance and teaching.

In order to share specific topic material and effectively to utilize our teachers, small group teaching has been adopted. In the first year, two-hour seminars are held monthly on topics related to the goals and objectives of the course. Students are asked to share their experiences around such problems as the house call, the physician-patient relationship, the spectrum of primary care, and the art of medicine.

Table 1
Preceptor Program Organization

	1st Year	2nd Year	4th Year
Sites:	Private practice MPU* Emergency room	→	→
Duration:	½ day/every other week	6-8 weeks	4 weeks
Continuity:	Longitudinal	Block	Block
Conferences:	Monthly	Weekly	Once per rotation
Status:	Elective	Elective	Required
Enrollment: (75-'76)	43	7	56

*Model practice unit of a family practice residency.

Table 2
Preceptorship Program Goals and Objectives

First Year	Second Year	Fourth Year
M.D.-patient relationship	→	→
Family and disease	→	→
Spectrum of care	→	→
Health care delivery system	→	→
Correlation with basic science	→	→
	Common problem management	→
	M.D. as a person	→
		Undifferentiated problem management
		Community resources and team care
		Office management
		Patient education
		Preventive medicine

In the summer of 1976, seminar teaching for second-year students evolved around weekly conferences dealing with the office diagnosis and management of the top twenty problems in family practice as defined by Marsland, Wood, and Mayo in Virginia (Table 3).⁴

Table 3
Content of Family Practice*
Rank Order of Diagnosis by Frequency

Rank	Description	Total Frequency
1	Other medical exam for preventive and presymptomatic purposes	43,951
2	Benign or unspecified hypertension w/wo heart and/or renal disease	30,235
3	Lacerations, amputations, contusions, and abrasions	21,137
4	Pharyngitis (including febrile sore throat and tonsillitis)	20,176
5	Bronchitis, acute	13,511
6	Sprains and strains	12,830
7	Diabetes mellitus	12,435
8	Coryza (non-febrile common cold)	10,951
9	Obesity	10,679
10	Febrile cold and influenza-like illness	9,366
11	Otitis media, acute	9,145
12	Depressive neurosis	7,833
13	Cervical smear	7,706
14	Normal pregnancy prenatal care	7,189
15	Anxiety neurosis	6,645
16	Arteriosclerosis (including cardiovascular disease)	6,613
17	Vulvitis, vaginitis, and cervicitis (non-venereal)	6,324
18	Abdominal pain other than colic	5,638
19	Congestive heart failure	5,052
20	Urinary infection (cystitis)	4,852

(N = 526,196)

*Adapted from Marsland DW, Wood M, and Mayo F: A data bank for patient care, curriculum, and research in family practice. *Journal of Family Practice*, 3:40, (February) 1976.

In the fourth year, three students and their preceptors meet at the end of a four-week block rotation to discuss each student's family case presentation. The student is expected to make a home visit, speak to as many family members as possible and share his understanding of the family-disease interaction with the group. Occasionally, a social worker or other health worker has helped to expand the perspective of the students and preceptors.

All office-based teaching, whether in a residency model practice unit, a private solo or group practice, or an emergency room, takes place in

an informed setting. Patient acceptance of the student's presence is enhanced by a prominent sign announcing each student and the goals of the educational program. In the residency model practice units there are two-way mirrors and video tape equipment which, after *written* permission from the patient, are used to observe the student's clinical skills.

Teaching at sites other than the office is also emphasized. House calls, hospital rounds, nursing home rounds, and school calls all are incorporated into the teaching programs.

Evaluation

Evaluation has been described as an academic autopsy.⁵ The dissection of the preceptorship involves a close look at the successes and failures of students, preceptors, and faculty. Information is then available for feedback in order to refine the goals and objectives and to improve their implementation. In short, the evaluation enables us to collect and analyze information in order to make future decisions.

The evaluation of the first-year elective has been primarily subjective, but has pointed to a highly positive experience. The home care program in the Department of Community Medicine of CMDNJ-RMS has provided help to the student who has had difficulty in obtaining a house call experience because of his assignment to an emergency room. The program has also been expanded as a result of the input from the preceptors and students who feel that hospital rounds should be a required rather than an optional experience.

The development of the second-year summer preceptorship is a result of pilot programs that were used during the past three years. Evaluation of these initial experiences led to the current second-year program which began in June 1976.

Evaluation of the fourth-year preceptorship at the student level involves a detailed critique of the course objectives and the preceptors. The preceptor evaluates the student with respect to his or her patient management and problem-solving skills. We are currently trial-testing an evaluation of students using anonymous questionnaires filled out by patients. In addition,

an attitude scale is being pre- and post-tested to determine any changes in the attitude of the medical student as a result of the preceptorship.

All preceptorship program evaluation is written as well as oral. The students are briefed on the goals and objectives as well as the particulars of their preceptorship site before each rotation. At the end of the preceptorship, the students are debriefed orally as individuals or as a group. The oral evaluation, without student fear of recrimination or reprisal, appears to be extremely honest. The evaluation material is then summarized and periodically shared with students and preceptors. As time has progressed, student reactions to both the elective first-year and required fourth-year programs have been very gratifying.

Discussion

The preceptorship, although time-tested, is currently undergoing re-evaluation nationally and in New Jersey. The preceptorship is the most logical teaching technique since about 90 percent of family practice encounters occur in the office setting. It is the quality control of the preceptorship experience, however, that deserves sponsorship at the medical school level. Briefing and debriefing sessions with students, frequent feedback of student comments to the preceptor, and visits by Department members to evaluate and re-evaluate practice sites enhance the quality of the teaching.

There are several educational benefits for the preceptors in the program. Many have expressed satisfaction with the new ideas derived from their "give and take" with students. Many physicians report "professional invigoration"⁶ which leads them to deliver an improved quality of patient care. Often a good teacher-preceptor will learn as much as he teaches. Several preceptors have found themselves encumbered by their medical records as they attempted to teach in the office and so have converted from 5" x 8" card files to the popular problem-oriented medical records. The result has been a subjective improvement in teaching as well as in patient care.

Patients often report being impressed with the presence of the student in "their" doctor's office. His professional esteem is thereby raised in their

eyes. Additional time and study are accorded patients by the medical student which is appreciated by the patient.

While financial remuneration may vary from medical school to medical school, clinical faculty appointments are often granted to preceptors. The availability of teaching also may be helpful in recruiting future associates or partners. Anecdotal experience suggests students occasionally return to join their preceptors as partners.

Medical-legal problems have been non-existent with the American Medical Student Association Preceptorship Program which has had 225 students in five years.⁷ Our experience with 187 students in three years in New Jersey would corroborate this finding.

Adequate notification to patients of the presence of students by means of signs in the waiting room or open letters of explanation or both, have ameliorated most objections. Previous studies of patient feelings in this regard have been done primarily in England and Canada. In Great Britain, Wright⁸ studied the effect of the student on the doctor-patient relationship. He found that 40 percent of the patients interviewed would *prefer* not to discuss sexual, anxiety, or family problems; 22 percent were reluctant to discuss money problems; 18 percent would prefer not to discuss work problems when the student was present. Another study found that one patient in 20 objected to the student's presence in the office.⁹ These objections were greater for women than for men; the elderly were the most tolerant of the student's presence. Canada has begun to study the effect of students in the university family practice units and has found a minority disturbed by the student.¹⁰ These studies would appear to confirm the more positive aspects of the student's presence.

There are, however, some disadvantages for the preceptor. The very nature of an "outsider" in the office may create tension and some personality conflict. The Department attempts to reduce this by matching students with the preceptor at the briefing interview.

Ritual will be tested by the student as the physi-

cian is forced to document his thinking with respect to tests and medications. Differences of opinion may arise supplying fuel for discussion, such as the use of psychotropic drugs and antibiotics. Some questions that the students raise may go unanswered. Occasionally student questions, just as occasionally patient problems, must exist without complete resolution.

In addition, there are increased costs when a student is present. Either longer hours are required to see the usual number of patients or fewer patients are seen in a given day. There are other overhead costs as well. The Department of Family Medicine at CMDNJ-RMS has recognized these problems and grant money is available to defray some of the costs.

But, the return of the practicing physician as a valid resource in medical education outweighs these problems. The family physician has been given the opportunity to serve as a role model for new physicians. The preceptorship, though restructured, is alive and growing in New Jersey.

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Acute disseminated intravascular coagulation in obstetrics is not uncommon and probably will be encountered by every obstetrician. When uterine atony is associated with acute D.I.C., it may be refractory to treatment and produce massive hemorrhage. Four case reports illustrate this problem. A course of management is suggested.

Acute Disseminated Intravascular Coagulation and Uterine Atony

Paul E. Stroup, M.D. and Geraldine R. Scott, R.N., Ed.M., Camden

Four patients with acute disseminated intravascular coagulation, associated with uterine atony, were treated within slightly more than three years. Because uterine atony has not been stressed sufficiently in the American literature and because acute disseminated intravascular coagulation occurs more frequently than previously believed, the following cases are reported.

Case Reports

Case 1: A 29-year-old female, gravida 4, para 3, was hospitalized in active labor following an uneventful antenatal course.

Although the total period of labor was four hours and fifteen minutes, progress from five cm. was rapid and the delivery was precipitate without anesthesia. After spontaneous expulsion of the placenta the patient suddenly lost consciousness and became cyanotic. The blood pressure was unobtainable and the skin cold and clammy.

Immediate therapy included insertion of a central venous pressure catheter, intravenous fluids, and oxygen by mask. At this time marked uterine atony was noted. The blood pressure was 110/70, pulse 130. A sample of blood disclosed no clotting within 30 minutes. Other studies were: pO_2 82 mm.Hg., pH 7.31, pCO_2 21.2 mm.Hg., base excess -13.9 mEq/L, platelets 226,000/cu.mm. (morphology normal), venous clotting time 32 min., partial thromboplastin time 64 sec., prothrombin time 28 percent, clot lysis present at 4 hours and 24 hours, clot retraction incomplete, fibrinogen less than 100 mg/dl.

Subsequent treatment included: uterine massage, whole blood, intravenous oxytocics (20 units pitocin per 1000cc.) and fibrinogen (6 grams over 40 minutes).

The hemorrhage seemed to be under control two hours after delivery, so the fully alert patient was transferred to the recovery room where she received 1500cc. of whole blood and oxytocics (intramuscular ergotrate and intravenous pitocin, 30 units/1000cc.). Despite this the uterus remained boggy. The blood pressure varied from 84/60 to 114/80 and the pulse from 120 to 156. The central venous pressure

remained near zero. Studies at this time revealed: pO_2 110 mm.Hg. and pH 7.46, pCO_2 24.5 mm.Hg., prothrombin time 85 percent, platelets 296,000/cu.mm., coagulation time 15 min. 30 sec., partial thromboplastin time 31 sec., clot lysis absent at 4 hours and 24 hours, clot retraction complete, hemoglobin 10 grams.

Six hours after delivery the uterus was firm, but bleeding continued. Accordingly, re-examination of the genital tract was performed. Brisk bleeding was noted from small lacerations of the vagina. Hemostasis was obtained by suturing oxycel and gelfoam over the bleeding areas. An additional 500cc. of whole blood and intravenous oxytocics (20 units pitocin/1000cc. of Ringer's lactate) were infused during this procedure. A liter of Ringer's lactate with 30 units pitocin was continued over the next twelve hours. No further bleeding occurred.

The remaining course was uneventful, and the patient was discharged on the fifth postpartum day. Prior to discharge, gamma globulin, 5cc., was given intramuscularly and repeated in one month. However, hepatitis developed three and one half months later.

Case 2: A 31-year-old female, gravida 9, para 8, at 20 weeks' gestation was hospitalized for elective interruption of pregnancy and sterilization.

An abdominal hysterotomy and bilateral salpingectomy were performed. Uterine atony developed and did not respond to intrauterine injection of 10 units of pitocin, intravenous ergotrate gr. 1/320, intravenous pitocin (30 units/1000cc. of 5 percent D/W), massage, and hot packs applied to the surface of the uterus.

Because of the persistent atony and the patient's parity, hysterectomy was elected. During hysterectomy continuous oozing from the abdominal wall and retroperitoneal tissue was noted. Laboratory studies at this time were: fibrinogen 10.5 mg/dl. partial thromboplastin time 60 sec., platelets 240,000 cu.mm. (morphology normal), prothrombin time 70 percent, clot retraction complete, clot lysis present, plasma clot lysis absent, hemoglobin 7.3 grams with hematocrit 21 percent.

From the Department of Obstetrics and Gynecology, The Cooper Medical Center, Camden, New Jersey, where Dr. Stroup is attending obstetrician and Ms. Scott is a member of the Department of Nursing. This paper was presented to the New Jersey Obstetrical and Gynecological Society, April 2, 1976.

Hot packs and hemostatic ligatures seemed to control the bleeding. Hematologic consultation advised against the use of heparin or fibrinogen. The patient received 2000cc. of whole blood during the procedure.

Two hours after surgery no active bleeding was observed; the blood pressure and pulse were 94/50 and 88. Hemoglobin and hematocrit were reported as 5.6 grams and 16 percent. Following another 500cc. of whole blood the hemoglobin and hematocrit were reported as 8.4 grams and 24.5 percent. Other studies were: platelets 233,000/cu.mm., partial thromboplastin time 30 sec., prothrombin time 85 percent, clot retraction complete, clot lysis absent, plasma clot lysis absent, fibrinogen 96 mg/dl.

A sixth unit of fresh whole blood was administered the next morning. Despite the absence of bleeding and the clinical improvement of the patient, the hemoglobin and hematocrit over the next week varied from 7.8 to 8.8 grams and 24.5 to 26.7 percent, respectively. During that interval she received an additional 1000cc. of whole blood.

A pelvic examination on the ninth post-operative day revealed induration of the left pelvic wall. An intravenous pyelogram disclosed a hydronephrosis on this side. Cystoscopic ureteral catheterization was unsuccessful.

One month after discharge an intravenous pyelogram was normal; hemoglobin 11.3 grams with hematocrit 35.6 percent.

Case 3: A 38-year-old female, gravida 6, para 3, at 22 weeks' gestation, was hospitalized with a diagnosis of intrauterine fetal death of three to four weeks' duration. On the day of admission, 20cc. of typical "tobacco-juice" amniotic fluid was removed and 200cc. of 23 percent saline solution infused. The following day, an intravenous solution of 20 units pitocin in 1000cc. of 5 percent D/W was started. A macerated stillborn and placenta were delivered spontaneously. Following delivery, bleeding which was heavier than expected failed to slow with intramuscular ergotrate (gr. 1/320) and continuous intravenous pitocin (20 units in 1000cc.) at 40 gtts/min.

Two hours after delivery, the patient was taken to the operating room where the uterus was explored. A moderate amount of necrotic tissue was obtained. Uterine atony and persistent bleeding were noted. A blood sample drawn at this time failed to clot in 10 minutes. Other studies were: prothrombin time 14 percent, partial thromboplastin time over 120 sec., platelets 105,000/cu.mm., fibrinogen less than 40 mg/dl.

Immediate treatment included constant uterine massage, intravenous ergotrate and pitocin (30 units/1000cc.) and whole blood transfusions. Hematomas developed at all puncture sites. A hematologic consultant suggested intravenous heparin. There was no visible effect on the bleeding with administration of 3500 units over one hour.

Despite continuous oxytocics and massage the uterus remained atonic. A hemoglobin was reported as 9.8 grams with hematocrit 29 percent. Four grams of fibrinogen were administered. The uterine cavity was lavaged with 1500cc. of hot sterile saline solution. Over the next two hours, after 3000cc. of whole blood and 120 units pitocin in 4000cc. of fluids, the bleeding stopped, and the uterus remained firm. Studies were: prothrombin time 60 percent, partial throm-

boplastin time 42 sec., platelets 109,000/cu.mm., fibrinogen 170 mg/dl.

Intramuscular ergotrate and intravenous pitocin (20 units per 1000cc.) were continued post-operatively. The volume of fluid intake was monitored by the CVP and urinary output. No further bleeding was noted.

Three days post-operatively the hemoglobin was 11 grams and the platelet count 139,000. Gamma globulin, 10cc., was administered on discharge and repeated in a month. Hepatitis did not develop.

Case 4: A 20-year-old female, gravida 2, para 1 was admitted for voluntary interruption of a 16 weeks' gestation. After the removal of 50cc. of normal amniotic fluid, 300cc. of 23 percent saline solution was infused. A laminaria tent was inserted into the cervix.

The following day, intravenous pitocin (30 units/1000cc. of 5 percent D/W) was started at 40 gtts/min. The fetus but not the placenta was expelled spontaneously. Because of heavy bleeding the placenta was removed manually, and a suction curettage performed. At the end of the procedure the uterus was atonic. Treatment included continuous massage, intravenous ergotrate, and intravenous pitocin (50 units/1000cc. of 5 percent D/W). A fibrinogen determination taken in the recovery room was 90 mg/dl.

With continuous oxytocics and occasional massage the uterus remained moderately firm. A hemoglobin four hours post-operatively was 7.9 grams. Because of this and a pulse rate averaging 120, 1000cc. of whole blood were administered and pitocin (40 units/1000cc. of 5 percent D/PSS) continued.

Bleeding was well controlled, and the following morning intravenous therapy was discontinued. A hemoglobin determination at that time was 9.6 grams.

The remainder of the hospital stay was uneventful.

An attempt to identify increased fibrinolytic activity was not made in the above patients.

Comment

Uterine atony, a recognized cause of post-partum hemorrhage, usually will respond to massage and oxytocics. When it occurs in association with a coagulation defect, however, treatment may be ineffective and hemorrhage profound. For this reason a coagulation defect should be sought in every case of intractable atony.

Diagnosis

A coagulation defect can be confirmed quickly by observing that a sample of venous blood does not clot within 15 minutes or, that once formed, the clot lyses within 30 minutes. A coagulation survey usually will demonstrate multiple defi-

ciencies. A fibrinogen level (which is available in most laboratories) of less than 150 mg/dl confirms the clinical impression of a coagulation problem.

Our patients exhibited both a coagulation defect and uterine atony. A fibrinogen deficit was common to all cases. In three of the four cases, where a coagulation profile was obtained, several coagulation tests were abnormal.

Treatment

The most common type of coagulation defect in obstetrics is due to continual conversion of fibrinogen to fibrin resulting from the exposure of the maternal blood stream to one or more of the products of conception. In order to arrest this process, all products of conception must be removed from the uterus as soon as the diagnosis is suspected. Exploration of the uterine cavity will accomplish this and will disclose uterine, cervical, or vaginal lacerations and uterine atony if present. Unfortunately, removal of all products may not be sufficient to control the hemorrhage. In the cases reported, the greatest blood loss occurred after the uterine cavity was empty; it was due to both a continuing coagulation defect and intractable uterine atony. Continued bleeding after removal of the precipitating factors has been explained by perpetuation of the coagulation problem by a reservoir of fibrinogen-converting substances in the uterine veins¹ and myometrial inhibition by both amniotic fluid¹ and fibrin degradation products².

Since the intravascular production of thrombin is considered a main feature of intravascular coagulation, heparin has been recommended to prevent further progression of the coagulation process. It has been used in both acute hemorrhagic³ and chronic cases (dead fetus syndrome)⁴. Straub⁵ has challenged the use of heparin in intravascular coagulation on two counts; first, the usual reported coagulation parameters may not reflect accurately a consumption coagulopathy, in which event heparin usage could prove a detriment. Secondly, Straub believes the patient who is not bleeding should receive heparin only when there is definite evidence of inadequate organ perfusion,

such as impending renal shut-down. We used heparin under the direction of a hematologist in one of our cases without apparent beneficial or adverse effect. In view of the controversy surrounding the use of heparin in intravascular coagulation, its usage would seem to be difficult to justify.

Fibrinogen has been used by obstetricians whenever hypofibrinogenemia was present and excessive bleeding continued. Today its use is being challenged for the following reasons: Hemorrhage occurs in only 26 percent of cases of hypofibrinogenemia^{2,6}. A coagulation defect rarely is due to one factor. Two units of blood contain about the same amount of fibrinogen as one unit of fibrinogen and, if fresh, provide all the factors needed for coagulation. Added fibrinogen may aggravate a consumption coagulopathy as well as uterine atony³. Finally, its use entails a risk of hepatitis (6 to 35 percent)⁷. Because of these factors the use of fibrinogen has been supplanted by cryoprecipitate (100 mg. fibrinogen/unit) at our hospital. This material has a risk of hepatitis similar to that of a unit of blood and therefore considerably less than a unit of commercial fibrinogen.

Uterine atony which was resistant to the usual doses of intravenous oxytocin (20-30 units/1000cc. fluid) was a feature common to all the cases described and responsible for the majority of blood loss, which required blood transfusions of 1000cc. to 4500cc. The duration of uterine atony varied from two to four hours. Although this has been mentioned by previous authors^{1,2,6,8-10} neither its prolonged and intractable nature nor the need for early and vigorous treatment has been stressed sufficiently. Uterine atony, complicating acute disseminated intravascular coagulation, should be treated promptly by massage and oxytocin (100 units/1000cc. fluids). The rate of flow can be adjusted to the response, but if contraction of the uterus is not sustained, endometrial lavage with hot physiologic saline should be tried^{8,11}. Packing for uterine atony still has its advocates¹ but it does not seem to be too popular in this country. Finally, if hysterectomy is considered, one first should try uterine and infundibulopelvic vessel ligation. The technique described

by O'Leary⁹ seems to be faster and safer than the hypogastric vessel ligation recommended by others¹².

Summary

Four obstetric cases complicated by acute disseminated intravascular coagulation have been reported. In all patients, intractable uterine atony was the main reason for uterine hemorrhage. After removing the precipitating factors, vigorous treatment with concentrated intravenous oxytocin should be used. Other treatment modalities recommended are fresh whole blood and, in selected cases, hot saline uterine lavage, cryoprecipitate, pelvic vessel ligation, and hysterectomy.

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Readers Please Note

The authors of "Basal Cell Nevi Syndrome Associated with Maxillary Antral Carcinoma" (*J Med Soc NJ* 73:971-974, November 1976), William E. Matthey, M.D., Murray Rothberg, M.D., and Parviz Khorrami, M.D., of Livingston, wish to notify our readers that they were unaware of previous publication of a report of this case.

Under the title, "Basal Cell Nevus Syndrome: A Case Report with Associated Carcinoma of the Maxilla," presentation of the case by Myron J. Shapiro, M.D., also of Livingston, to the Eastern Section of the American Laryngological, Rhinological, and Otological Society in Boston on January 7, 1970, was published in *The Laryngoscope* 80:777-778, May 1970.

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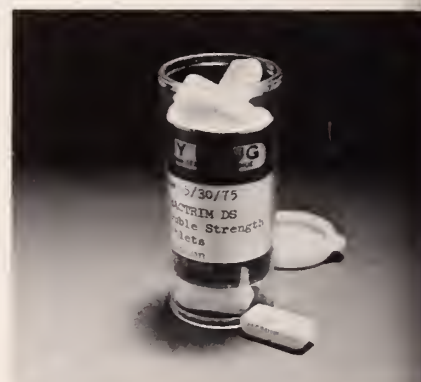
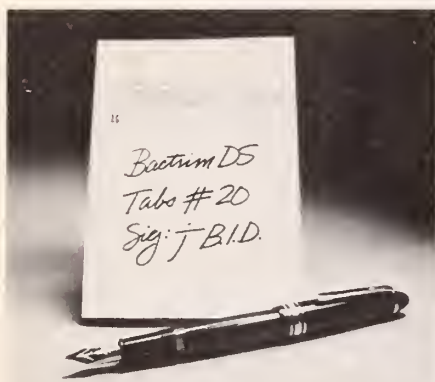
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For chronic or frequently recurrent cystitis and
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Indications: Chronic urinary tract infections evidenced by persistent bacteriuria (symptomatic or asymptomatic), frequently recurrent infections (relapse or reinfection), or infections associated with urinary tract complications, such as obstruction. Primarily for cystitis, pyelonephritis or pyelitis due to susceptible strains of *E. coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris* and *Proteus morganii*.

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Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. **Data are insufficient to recommend use in infants and children under 12.**

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

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Spontaneous pneumothorax generally is interpreted as a benign entity independent of other forms of respiratory disease. It characteristically appears in males less than 40 years of age. A small but significant percentage are recurrent, however one-fifth will be a manifestation of underlying respiratory disease. Specific examples presented include tuberculosis, eosinophilic granuloma of the lung, and the distinct entity catamenial pneumothorax.

Spontaneous Pneumothorax as a Manifestation of Pulmonary Disease*

**J. W. Sokolowski, Jr., M.D.,
W. V. Harrer, M.D., B. R. Aikey, M.D.,
and F. Enriquez, M.D./Camden**

Pneumothorax was known in ancient times. Combolusier initially discussed its pathophysiology in 1747. The term "pneumothorax" appears to have originated with Itard in 1803. Laennec described the clinical manifestations in 1819. Initially it was believed that the majority of cases were associated with tuberculosis. However, Kjaergaard recognized pneumothorax as a benign entity in 1932.¹

Clinical Characteristics

Spontaneous pneumothorax characteristically appears in the younger age groups. Sixty to eighty-two percent of the patients are less than 40 years of age; the majority, 80-85 percent, are males. Characteristically the patient with a spontaneous pneumothorax tends to be ectomorphic and underweight by 20 to 30 pounds. Their thoraces are relatively long with a decrease in the anteroposterior diameter.

Spontaneous pneumothorax is usually due to a congenital or acquired abnormality of the lung and pleura, associated with underlying pulmonary parenchymal disease, specifically cysts. Rupture of these cysts appears to be the main cause of a pneumothorax. In 1960, Martin and Patrick proposed a classification for the mechanisms by which pneumothorax occurs:²

Group II: Injury to the fascial planes of the neck with mediastinal emphysema and tearing of the mediastinal pleura.

Group III: Direct connection of the distal airway to the pleural space.

(a) Rupture of a bleb on the surface of the lung without damage to the thoracic wall.

(b) Injury to the thoracic wall which tears both parietal and visceral pleurae and damages the underlying lung.

Group IV: Breaks only in the parietal pleura which connects the pleural space to the extrathoracic sources of air.

There is no preferential side for the occurrence of pneumothorax; between 4.4 and 21 percent are recurrent. In 78 percent of the patients with initial pneumothorax there is no evidence of chronic lung disease. Ten to nineteen percent of patients have a tension pneumothorax. Fifteen percent of mechanically ventilated patients develop a pneumothorax. In a small percentage, spontaneous pneumothorax may be the initial manifestation of an underlying pulmonary disorder. Several examples will be presented to illustrate this facet. Table I enumerates those entities which may contribute to the development of a pneumothorax.

Case Reports

Case 1: A 63-year-old male had an antecedent history of tuberculosis (pulmonary, inactive), chronic obstructive pulmonary disease (Type A), and a left pneumothorax in January of 1974. He experienced the acute onset of severe left thoracic pain and worsening of his dyspnea following a productive cough.

Group I: Alveolar rupture with perivascular spread of gas to the hilum and tearing of the mediastinal pleura.

*This study is from Our Lady of Lourdes Hospital, Camden, New Jersey.

Physical examination revealed a cyanotic elderly male in acute respiratory distress secondary to thoracic pain and dyspnea. Respiratory rate was 32/min. at rest. The trachea was deviated to the right, the thorax was hyperinflated with an accentuated dorsal kyphosis, and diminished breath sounds were noted on the left. A supraventricular tachycardia was noted, but there was no evidence of clubbing. Chest x-ray revealed a left pneumothorax. (Figure 1).

Following intercostal drainage and lung biopsy, a poudrage procedure was performed. (Figure 2).

Table I

- I. Trauma
 - (1) Penetrating
 - (2) Blunt
- II. Procedures
 - (1) Tracheostomy
 - (2) Mediastinoscopy
 - (3) Peritonoscopy
 - (4) Laparoscopy
 - (5) Amniocentesis
 - (6) Transcricothyroid bronchography
 - (7) Subclavian puncture
 - (8) Anesthesia
 - (9) Mechanical ventilation
 - PEEP
 - (10) Thoracentesis/pleural biopsy
 - (11) Cardiopulmonary resuscitation
- III. Pulmonary Disease
 - (1) Tuberculosis
 - (2) Echinococcus cyst
 - (3) Tumor
 - a) Sarcoma
 - (1) Osteogenic
 - (2) Fibrosarcoma
 - (3) Synovial sheath
 - (4) Sarcoma: lymphosarcoma
 - b) Mesothelioma
 - c) Carcinoma of the pancreas
 - d) Carcinoma of the adrenal
 - e) Carcinoma of the lung
 - (4) Interstitial lung disease
 - (a) Eosinophilic granuloma
 - (b) Berylliosis
 - (c) Interstitial fibrosis
 - (d) Sarcoidosis
 - (e) Scleroderma/tuberos sclerosi
 - (5) Obstructive lung disease
 - (a) Emphysema
 - (1) Marfan's syndrome
 - (b) Cystic fibrosis
- IV. Congenital
 - (1) Potter's syndrome
 - (2) Familial fibrocystic dysplasia

Comment: The incidence of pulmonary tuberculosis in association with pneumothorax has been reported as 0.66 percent to 3.8 percent.³ Auerbach⁴ described the pathogenesis of this combination as the result of a subpleural tuberculous infiltrate which undergoes liquefaction and results in pleural necrosis and rupture. The



Figure 1—(Case 1) Left pneumothorax with bilateral fibrocalcific changes.

consequent bronchopleural fistula may temporarily seal off, but frequently it persists. Therapy in this instance includes intercostal catheter drainage and antituberculous chemotherapy.

Case 2: A 37-year-old female experienced acute dyspnea and right posterior thoracic discomfort, concurrent with the onset of menses. For an 18-month period the patient had experienced cyclic episodes of thoracic discomfort and dyspnea for a period of 48 hours within 10 days of the onset of her menses.

Physical examination revealed a young female with a respiratory rate of 24/min. The trachea was deviated to the right and diminished breath sounds were noted over the right hemithorax. A chest x-ray revealed a right pneumothorax. (Figure 3).

Following resolution of the pneumothorax, a lung biopsy and pleurodesis with talc were performed (Figure 4).

Comment: Spontaneous pneumothorax occurring at the time of menstrual periods was first described by Maurer and his associates in 1958.⁵ The features of this clinical entity include: involvement of the right hemithorax; a close temporal relation between the cyclic occurrence of

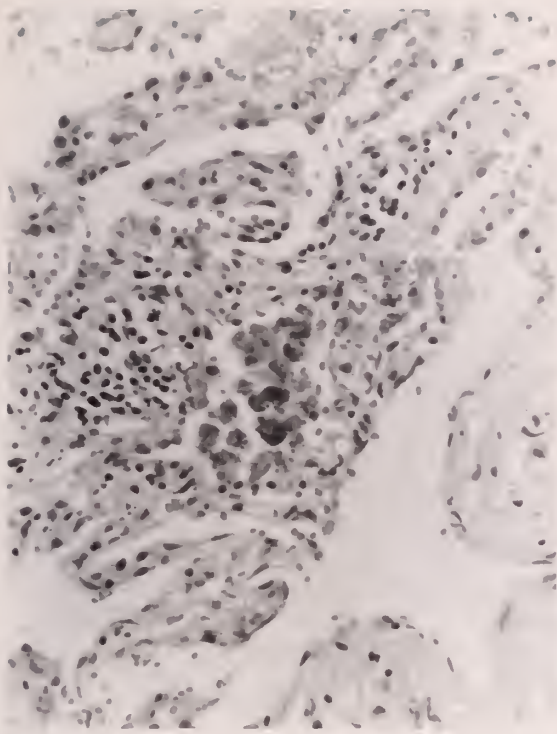


Figure 2—Hematoxylin and eosin: 400 power multiple hemosiderin macrophages and marked alveolar interstitial fibrosis. Also mononuclear inflammatory cells are noted in the alveolar septa.



Figure 3—(Case 2) Right pneumothorax.

pneumothorax and the onset of menses; the failure of a pneumothorax to occur at other times of the menstrual cycle; a relatively late onset of the disease with the majority of the patients being in the fourth decade of life; and failure of the pneumothoraces to occur, if the patient is pregnant or taking anovulatory agents. There may be clinical and/or pathologic evidence of pelvic endometriosis in these patients, and on occasion pleural or diaphragmatic implants may be found. Perforations may be present in the right hemidiaphragm.

At the time of thoracotomy a pulmonary process responsible for the air leak may not be found and if pleurectomy is not performed, further occurrences may take place.⁵ The source of the intrapleural air remains conjectural. Some patients have been noted to have apical bullae at the time of thoracotomy. It has been postulated that an intrapulmonary endometrial implant may be so situated that a swelling of the lesion concurrent with the onset of menses would encroach upon the lumen of the bronchiole so as to

create a check-valve mechanism with resultant pleural rupture.⁶ It has also been suggested that the presence of pelvic endometriosis in some fashion permits air to gain access to the peritoneal cavity with resultant passage through congenital perforations in the diaphragm.

Case 3: A 12-year-old female was hospitalized with bilateral pneumothoraces without antecedent history of pleural-pulmonary disease. The patient was the product of a full term gestation, complicated by maternal urticaria which necessitated corticosteroid therapy. The patient's past history included varicella and rubeola. Exercise tolerance was normal and the patient had no respiratory symptoms until two weeks prior to admission. She experienced gradual evolution of thoracic pain of pleuritic nature in association with dyspnea. A chest x-ray revealed bilateral pneumothoraces. (Figure 5).

Physical examination was unremarkable except for generalized decrease in breath sounds. Following bilateral tube thoracostomy with resolution of the pneumothoraces, open lung biopsy was performed. (Figure 6).

Comment: Pulmonary involvement occurs in approximately 20 percent of the patients with eosinophilic granuloma and it has been estimated that 28 percent of such patients will have

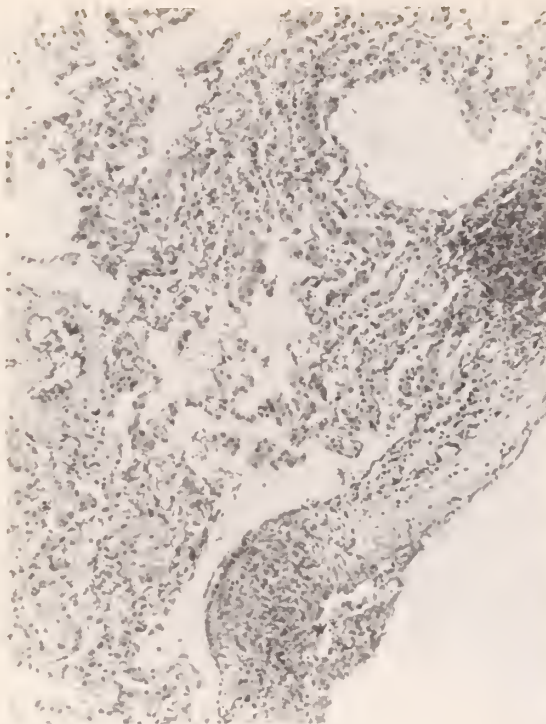


Figure 4—Hematoxylin and eosin:400. There is a marked mesothelial hyperplasia with hemosiderin macrophages. No endometrial glands or stroma are noted.

a spontaneous pneumothorax.⁸ Spontaneous pneumothorax may be an initial manifestation of pulmonary eosinophilic granuloma and is a particularly important feature when the disease is chronic. It may be bilateral and recurrent. Histologically, eosinophilic granuloma is characterized by focal accumulations of eosinophils and foamy macrophages. Granulomata may or may not be prominent. With progression of the disease fibrosis evolves.

Summary

Although spontaneous pneumothorax is interpreted as a benign entity and generally associated with other forms of respiratory disease it may, in approximately 20 percent of instances, be associated with and a manifestation of underlying respiratory disease. Consequently in those instances where such suspicion exists a definitive evaluation should be undertaken. In those patients who have evidence of recurrent pneumothoraces and where a pleurodices is indicated, a lung biopsy should be obtained at the time of thoracotomy.



Figure 5—(Case 3) Bilateral pneumothoraces superimposed on diffuse fibrocystic changes.

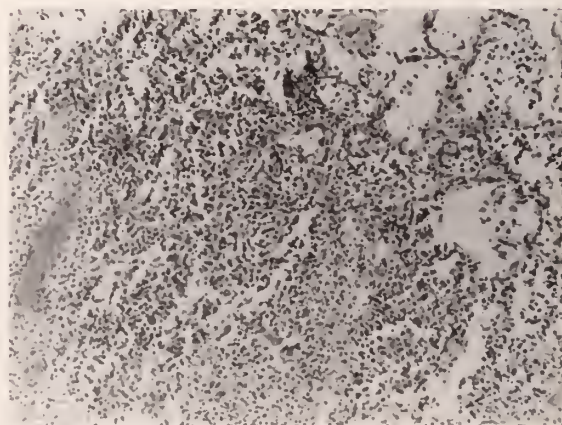


Figure 6—Hematoxylin and eosin:100x. There is an intra-alveolar exudate predominantly composed of bi-nucleated eosinophiles.

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Forty-six patients who underwent left ventricular aneurysmectomy alone or in combination with other procedures constitute the basis of this report. The immediate operative mortality was 6.5 percent and the late operative mortality was 9.3 percent. Eighty-five percent of the patients underwent concomitant revascularization, including 19 cases where the artery leading to the aneurysm was bypassed. The intra-aortic balloon assist pump was considered to be an important adjuvant tool in the management of these patients. It is felt that a complete reparative procedure will improve the results in the treatment of left ventricular aneurysms.

Surgical Management of Left Ventricular Aneurysms*

**Isaac Gielchinsky, M.D.,
V. Parsonnet, M.D., L. Gilbert, M.D.,
and E. K. Bhaktan, M.D./Newark**

Left ventricular aneurysm (LVA), a late complication of myocardial infarction, has been recognized more frequently since the popularization of coronary angiography. The natural history of LVA is well known. Eighty percent of untreated symptomatic patients are dead within 36 months of the onset of heart failure and the prognosis of patients with LVA is only half as good as those who have had a myocardial infarction without the formation of an aneurysm.¹

Operative treatment has become an established form of therapy and has improved both longevity and quality of life.²⁻⁴ It is the purpose of this communication to evaluate the results of surgery in a group of 46 patients treated at the Newark Beth Israel Medical Center.

Patients and Methods

Between January 1, 1970 and August 31, 1975, 46 patients underwent left ventricular aneurysmectomy, either as an isolated procedure or in combination with aortocoronary bypass (ACB) or valvular replacement.

Forty of the patients were men, ranging in age from 32 to 73 years, with a mean age of 53.6 years. The mean age for the six women was 57.6 years.

Presenting symptoms were: exertional dyspnea (61%); dyspnea at rest (43%); angina (69%); and bradycarrythmias in 7%. (Table I).

Table I
Presenting Symptoms

	No. of Pts.	%
Exertional Dyspnea	28	61
Dyspnea at Rest	20	43
Angina Pectoris	32	69
Arrythmias	3	7

At the time of surgery the patients were classified according to the New York Heart Association as follows:

Class I	3 patients (6.5%)
Class II	10 patients (21.7%)
Class III	15 patients (32.6%)
Class IV	18 patients (39.1%)

Indications for surgical treatment were: congestive heart failure refractory to medical treatment, progressive or intractable angina, arrythmias, and acute ventricular septal defect. There were no patients with peripheral embolization in this series.

The diagnosis was confirmed by selective coronary arteriography and ventriculography, usually performed by the Judkins technique. The Ejection Fraction (E.F.) was determined by planimetric observations from the ventriculogram traced in RAO projection.

Surgical Technique

A standard surgical technique for cardiopulmonary bypass utilizing a bubble Bentley

*This report is from the Department of Cardiac and Thoracic Surgery, Newark Beth Israel Medical Center and New Jersey College of Medicine, CMDNJ, Newark. Technical assistance was provided by K. Collins, R.N., T. Alpert and S. Siegel.

oxygenator or a hybrid Harvey oxygenator was universally employed. The heart was approached through a midline sternotomy. Modified hypothermia to 30°C was used in addition to topical cooling of the myocardium with cold Ringer's solution. Once on total bypass, the ventricle was dissected free of any pericardial adhesions and as the aorta was cross-clamped, the center of the aneurysmal wall was incised. These simultaneous maneuvers prevent embolization from mural thrombi.⁵ The thinned-out wall was resected and the edges approximated with interrupted horizontal mattress sutures of 000 Tycron[®] tied over Teflon felt bolsters. A second more superficial, over-and-over, continuous suture, was placed through all layers for reinforcement and to insure hemostasis. A venting catheter was placed at the apex of the wound and kept *in situ* with a tourniquet-held purse string suture of 00 silk.

Smaller aneurysmal areas were plicated, especially for posterobasilar lesions where there was danger of interference with mitral valve support structures. If a concomitant revascularization or valvular procedure was necessary, it was carried out according to the techniques previously described.⁶

In three recent cases, where the operative risk was considered unusually poor due to high left ventricular end diastolic pressure, intractable left ventricular failure, and ejection fraction below 0.25, the patients were supported by insertion of an intra-aortic balloon pump (I.A.B.P.).[†] The balloon pumps were inserted the night before surgery (one case) or simultaneously with the onset of cardiopulmonary bypass (two cases) and were continued for two to five days until the patient's condition was stable.^{7,15,18}

Methyl prednisolone in a dose of three mg./Kg was given intravenously during the procedure, once the patients were on total cardiopulmonary bypass. This dose was repeated three hours after the completion of the procedure. Oral anticoagulants were used routinely starting on the fourth post operative day to prevent thrombus formation at the intraventricular suture line.

[†]Datascope

Table II describes the various surgical procedures performed.

Table II
Operative Procedures Performed

	No. of Pts.
Aneurysmectomy Alone (1 Pt.-IABP)	5
Aneurysmectomy & Repair VSD	2
Aneurysmectomy & Bypass	37
Single (13) (2 Pts.-IABP)	
Double (17)	
Triple (4)	
Quadruple (3)	
Aneurysmectomy & Mitral Valvulotomy	
And Single Bypass	1
Aneurysmectomy, (L) Carotid Endarterectomy	
And Double Bypass	1

Postoperative Studies

In every instance, before discharge and whenever feasible thereafter (78 percent of the patients), repeat cardiac catheterization, ventriculography, and visualization of saphenous bypass grafts were done.

Results

Immediate operative mortality — Of 46 patients, 43 survived the immediate operative period. Thus, the operative mortality was 6.5 percent. (Table III). Two patients could not be weaned off cardiopulmonary bypass in spite of excellent flow through the vein grafts and had perioperative myocardial infarctions. The third patient died suddenly on the eighth post-operative day of an abdominal aneurysm which ruptured into the inferior vena cava.

Late operative mortality — In a follow-up period ranging from two to 54 months, six additional patients expired; one of them died of causes unrelated to his primary disease. The others had progressive heart failure. They were classified preoperatively as Class IV, their E.F. was between 0.1 and 0.29 and generally deteriorated after an initial period of improvement. (Table IV). The late mortality was 9.3 percent.

Quality of life — Of the 37 long-term survivors, 27 are now in Class I and eight are Class II. Two patients are worse. One of those had a postoperative closure of two bypasses and

Table III
Operative Deaths

Age	Sex	Class	No. of Bypasses & Flow	Pre-Op. E. F.	Cause of Death
50	M	IV	1 C (150 + 32)*	.32	M.I.
69	M	IV	3 LAD (60 + 0) C (140 + 0) RCA (70 + 0)	.18	M.I.
60	M	III	3 DIAG (90 + 0) C (120 + 0) RCA (100 ± 15)	.10	Ruptured Abdominal Aneurysm

*(Flow in cc/min plus additional flow of reactive hyperemia)

LAD-Left anterior descending coronary artery

C-Circumflex, lateral ventricular or marginal branch

RCA-Right coronary artery

DIAG-Diagonal branch of left anterior descending

Table IV
Late Post-Operative Deaths

Age & Sex	N.Y.H. Class	Procedure	E.F.	Cause of Death	Time Since Surgery (Mos.)
73-M	IV	Aneurysmectomy & V.S.D. Repair	—	C.H.F.	12 Months
67-F	IV	Aneurysmectomy & Bypass to R	0.21	C.H.F.	2 Months
55-M	II	Aneurysmectomy & Bypass to R & Carotid	—	CA. Pancreas	4 Months
55-M	IV	Aneurysmectomy, Two Bypass to Lad, RCA	0.14	C.H.F.	18 Months
62-F	IV	Aneurysmectomy	0.29 0.10	C.H.F.	4 Months
48-M	IV	Aneurysmectomy	0.22	C.H.F.	14 Months

sustained a myocardial infarction. The other patient, who, at age 32, was the youngest in our series was a Class III preoperatively. He had an aneurysmectomy and revascularization of three vessels which were open on post-operative angiograms. He has continued to have angina, congestive heart failure, and is now a Class IV.

All three patients with ventricular arrhythmias were in Class I and have remained so, but none has rhythm disturbances. There was a rather good correlation between the pre and postoperative ejection fractions and the functional classifications. (Tables V and VI).

Revascularization of the artery leading to the aneurysm. — Nineteen patients had revascularization of the vessel leading to the aneurysm. (Table VII). Sixteen have been studied postoperatively and in thirteen, the saphenous vein graft was open. In six of the patients, the flow was 25 cc/min or less.

Discussion

The original description of LVA is credited to John Hunter⁷ in 1757. Beck⁸ reported the first attempt at surgical treatment in 1944. As better knowledge of the characteristics and natural history of coronary artery disease was acquired, more comprehensive and rational surgical techniques gradually evolved.⁹⁻¹² Thus Cooley¹³ utilized cardiopulmonary bypass for safe removal of an LVA. Gradually, concomitant correction of associated coronary arterial and valvular lesions has become part of the reconstructive procedure.

Cooperman and his associates at Stanford University had an operative mortality of 42 percent in 12 patients operated upon prior to 1970 without the benefit of associated bypass grafting, whereas 43 cases who subsequently underwent surgery with concomitant repair of associated lesions, had a mortality of only 16

Table V
Correlation Between Improved E.F.
and Functional Class (24 Patients)

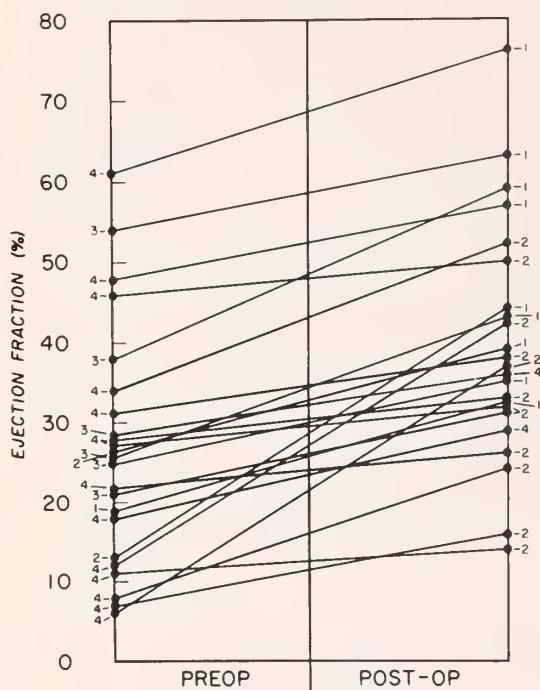


Table VI
Patients With Decreased E.F. Post-Op

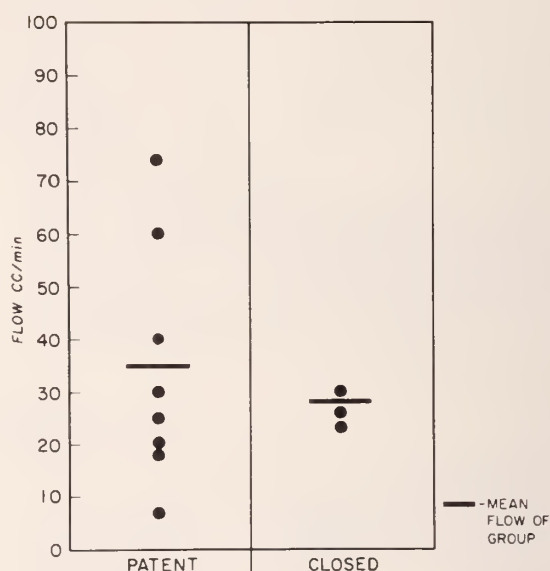
Pre	Post	Pre	Post
52% →	48%	II →	I
39% →	30%	III →	II
37% →	30%	I →	I
52% →	46%	III →	I
51% →	48%	IV →	I

percent.¹⁴ Other authors have also reported a lowering of the mortality rates.¹⁵ Our immediate mortality rate of 6.5 percent compares well with that reported by others. (Table VIII).

Physiological studies of patients who were in heart failure following reconstructive procedures, as well as experimental models, gave better insight into the amount of ventricle which could be removed safely.¹⁵ Stoney, *et al.*,¹⁶ demonstrated the need for eliminating the paradoxical motion of the anterior portion of the septum to attain a better cardiac performance.

Simultaneous revascularization or correction of other lesions during resection of LVA did not increase the operative mortality, but actually

Table VII
Revascularized Vessels Leading
to Aneurysm (19 Patients)



improved survival rates in patients with multi-vessel disease.¹⁴ Most of our patients (85 percent) underwent myocardial revascularization by means of aorto-coronary bypass in conjunction with the aneurysmectomy. Nineteen patients had revascularization of the vessel which led to the aneurysm, and sixteen of the grafts, including some with small flows, remained open.

It has been difficult to predict preoperatively which of the arteries leading to the aneurysm lend themselves to repair. The decision was usually made at the time of surgery by exploratory arteriotomy and the use of intraluminal probes.¹⁷ Vessels larger than 1.5 mm. in diameter with soft walls and angiographic indication of acceptable run-off are good recipient arteries.

We have found the intra-aortic balloon pump to be extremely useful¹⁸⁻¹⁹ (Figures 1 and 2). It has permitted us to undertake surgery in patients with high operative risk and low ejection fractions. Our data, which confirm results published by others, indicate that carefully planned surgical treatment will modify the natural history of symptomatic untreated post-infarction LVA, by improving the quality and duration of life.

Table VIII
Left Ventricular Aneurysm Operative Mortality-Various Centers

Author		Number of Cases	Number of Deaths	Percent
Favaloro, <i>et al.</i>	(1970)	191	23	12 %
Najafi, <i>et al.</i>	(1975)	132	14	10 %
Cooperman, <i>et al.</i>	(1975)	55	10	18 %
Stoney, <i>et al.</i>	(1974)	29	03	10 %
Loop, <i>et al.</i>	(1975)	230	15	6.5%
Merin, <i>et al.</i>	(1975)	17	03	18 %
Gielchinsky, <i>et al.</i>	(1975)	46	03	5.6%
Cooley, <i>et al.</i>	(1973) (Rejection)	61	12	20 %
Cooley, <i>et al.</i>	(1973) (Plication)	25	03	8 %



Figure 1 — Preoperative chest x-ray in a patient with congestive heart failure and a left ventricular aneurysm.



Figure 2 — Post-operative chest x-ray in the same patient showing marked clearing of lung fields. Notice intra-aortic balloon pump *in situ*. (arrow)

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There appears to be much that the practicing physician can accomplish in the area of smoking cessation. However, it requires some investment of time and effective utilization of staff. Moreover, physicians must see preventive medicine and smoking cessation as worthwhile activities and expenditures of time. There is every reason to suspect, however, that involvement in smoking cessation at the community and patient level will be a rewarding experience to the physician and a great benefit to the public.

The Practicing Physician and Smoking Cessation*

Norman Hymowitz, Ph.D., Newark

Few members of the scientific community find fault with the Surgeon General's (1964) report that cigarette smoking is hazardous to one's health.¹³ The association between smoking and cancer, emphysema, and heart disease is now firmly documented. Despite these findings, cigarette smoking remains an important health problem for a large segment of the American population.

While many physicians have been in the forefront in the fight against smoking, doctors on the whole have not played as significant a role as one might expect. Green and Horn, for example, found that about one in every four in their sample of American doctors did not accept responsibility for persuading patients to curtail smoking.⁶ In a British study, McKennell and Thomas reported three of every four adult smokers denied ever having been advised to stop smoking by a doctor.¹⁰

There may be a number of factors which tend to reduce physician involvement.^{3,8} Many physicians still smoke. Recent estimates suggest that 27 percent of male and 42 percent of female doctors smoke.^{4,5,11} One can hardly expect physicians who smoke to play an important role in smoking cessation.

Other factors mentioned were (1) traditional training of physicians which emphasizes care and cure of the sick rather than prevention, (2) the depersonalization of medical practice, and (3) the prevalent view that intervention on habit or life style is an invasion of privacy.

The appeal to practicing physicians for more ac-

tive participation in smoking cessation occurs quite frequently in the literature.^{3,8,12} Two levels of involvement have been stressed. One level entails community action through health education. The other involves the interaction between the physician and his patients. The present paper deals with the latter.

Physician-Patient Interaction

It is clear that simply informing patients of the health hazards of smoking and advising them to quit as they walk out the door will not help very many smokers. Studies of the effectiveness of physicians' advice to quit smoking reveal "quit rates" among the patients at one year follow-up as low as 0 percent.⁹ As noted by Blackburn, enthusiastic physicians may help approximately 25 percent of their patients quit smoking.³ Such compliance records may prove quite frustrating to the physician as well as the patient.

It is important to note that the results of highly effective quit-smoking programs are seriously compromised by high rates of recidivism which occurs following the termination of treatment.⁷ Since physicians often remain in contact with patients intermittently over a great number of years, the physician is in a unique position to obtain long-term success if he takes advantage of the possibilities for long-term intervention.

At a minimum, physicians must show genuine concern and empathy toward the patient. Despite the very real dangers of smoking, there

*Presented at the Second Annual Governor's Conference on Primary and Preventive Medicine at the 210th Annual Meeting of The Medical Society of New Jersey, June 5, 1976, at Cherry Hill. Dr. Hymowitz is Assistant Professor in the Department of Psychiatry, New Jersey Medical School, CMDNJ, Newark.

are many factors which make it very difficult for many smokers to quit. The possibility exists for referral of the patient to local smoking cessation programs. The concerned and aware physician should have available readily a list of such programs and descriptive brochures.

The physician should also be prepared to spend more time with the patient discussing smoking and smoking cessation. Becker suggests that certain beliefs must be present before people engage faithfully in preventive medical procedures.¹ Briefly, they must believe they are at risk of some disease, that their risk of disease can be lowered by the measures they are asked to take, and the cost of engaging in preventive measures must not outweigh the perceived benefits. The latter belief can be quite troublesome since human behavior seems to be governed by immediate consequences rather than some consequences which may or may not occur many years in the future.

Thus, physicians must deal with the patient on a very personal level. Why is smoking particularly dangerous to this particular patient? If the patient is hypertensive, for example, they might discuss at length the relationship between cigarette smoking and heart disease. Moreover, what does this particular patient have to gain from stopping smoking? Who is in a better position to discuss and provide feedback on beneficial changes in the health of the patient than the physician?

Behavioral Modification

To carry physician involvement one step further, it is possible to plan with the patient steps toward smoking cessation. The behavioral science literature on smoking cessation offers a wide range of procedures and techniques.² By taking advantage of continuing education programs in behavioral management, the physician may become a more effective agent of behavior change.

Whether the doctor refers the patient for smoking treatment or initiates a program on his own, it is most important to follow-up these activities. Did the patient go to the clinic, quit on the selected quit date, or cut down to a given number

of cigarettes? Each visit to the physician's office should be viewed as an additional opportunity for counseling and discussing the issue of smoking cessation. Moreover, intermittent contacts between visits by the telephone or through use of the mail may serve to increase the likelihood of compliance.

These contacts need not be time consuming and can be carried out by the nurse, secretary, or volunteer. Such frequent contact shows that the physician and his staff are concerned about the patient and feel that smoking cessation is an important goal. For patients trying to quit by some step-by-step procedure, these contacts may serve to specify new steps and strategies.

Once the patient has made some significant change, the task becomes one of combating recidivism. A personal congratulatory letter from the physician may serve to reinforce the desirable changes. For patients having difficulty accomplishing goals, the possibility exists for referral to established treatment programs or, perhaps, prescription of minor tranquilizers for a short period of time to take the "edge" off quitting.

Whether or not the physician becomes actively involved in smoking cessation, it is possible to contribute greatly to health education. The physician's waiting room could be put to good use by housing anti-smoking literature, audio-visual presentations on smoking, and self-instructional audio cassettes on techniques for quitting cigarettes. Moreover, the nursing staff could also play a role by actively discussing with the patients issues and questions concerning smoking and other matters germane to preventive medicine.

As noted above, one critical issue in behavior change programs concerns the cost/benefit ratio and long-term versus short-term satisfaction. Physicians and their staff can play an active role in fostering the attitude that not-smoking is a worthwhile goal in itself. Rather than giving up smoking, the patient is acquiring good health and the prospects for a better and fuller life. To the extent that immediate incentives for behavior change are available, the prospects for better compliance in many areas of health

behavior are improved. One important incentive which ought to exert considerable control over behavior is money. To the extent that smoking cessation is important to the physician and patient, some reduction in fees for annual examinations for non-smokers and ex-smokers may facilitate greatly desirable changes in behavior.

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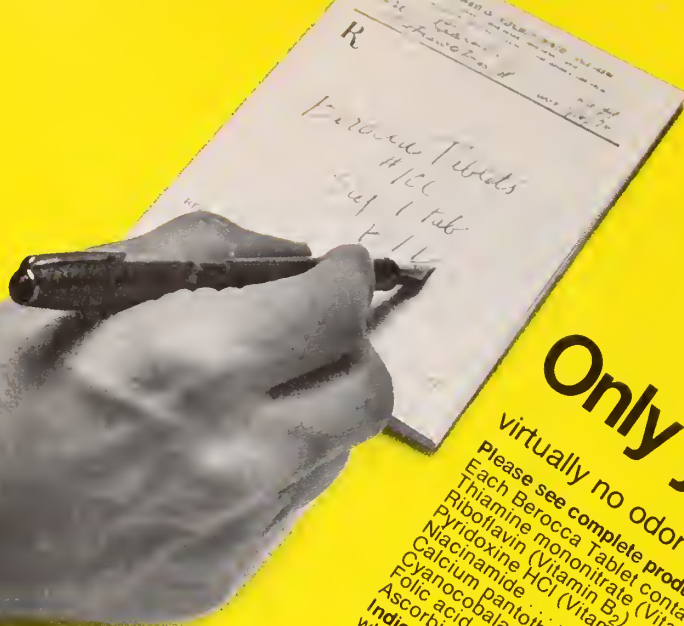
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Endotracheal injury due to indwelling endotracheal and tracheostomy tubes has been discussed. Pathophysiology of tracheal stenosis has been considered. Emphasis on thorough investigation of the size and location of the stenotic area is made. This will determine the proper surgical procedure; if possible the cervicomediastinal approach is preferred. The procedure may be augmented by tracheal mobilization and laryngeal suspension. The case reports exemplify this procedure and the problems related to endotracheal trauma. The need for better endotracheal tubes and methods of controlling endotracheal pressures during assisted ventilation has been scored.

Tracheal Stenosis

Mark Levey, M.D., Livingston*

Widespread use of positive pressure assisted ventilation through cuffed tracheostomy and endotracheal tubes in patients with respiratory failure has resulted in unexpected tracheal injuries.¹⁻⁴ The cuffed tube was designed to seal the system to allow the necessary pressures for the respirators to be self-regulated and to permit adequate ventilation of the patient. However, it is now apparent that the inflated cuff can be the etiology of tracheal injuries of severe magnitude. This paper will discuss the problem and report three such cases.

Etiology and Pathology

Injury at the tracheal stomal site had been described prior to "the era of the cuff," but Pearson⁴ reported that stomal stenosis is more common than cuff stenosis. In a prospective study, he showed that almost all tracheostomies produce some narrowing at the operative site. However, the more significant injuries occur 1½ to 3½ cm. below the stoma in the area of the cuff. Stomal strictures are related to excessive removal of cartilage and mucous membrane, destruction of additional tissues by tube pressure, infection, impaired blood supply due to dissection, and injury to the cricoid cartilage. These strictures are often triangular since the posterior wall is not involved.

Cuff stenosis, on the other hand, is usually circumferential. Ulceration is noted within the first 48 hours. The ulcer deepens and granulations are then noted as reparative processes attempt to correct the defect. Finally, the blood supply is impaired locally by the continued cuff pressure and cartilage necrosis takes place. Fibrous inva-

sion of the area produces a stricture. The mature stricture usually takes one month to form — a time when symptoms are first appreciated — but obstructions have been reported within the first two weeks and as late as one-and-a-half years. Periods of hypotension, low cardiac output, and chronic lung disease probably contribute to tissue oxygen deprivation and favor this destructive process.

From clinical observations, it would seem that at least two types of obstruction can take place. Tracheal collapse with loss of cartilage support may occur, with or without firm stenosis.² This produces the "wet straw," that is, a relatively large segment of trachea may be sucked in during inspiration producing a functional obstruction. This would be a form of traumatic chondromalacia. That kind of injury may heal without significant loss of tracheal lumen leaving a satisfactory airway. The second type, which may occur alone or coupled with the above, forms a firm localized stenosis, frequently circumferential, and a mechanical obstruction. This form of stenosis usually takes longer to develop.

Diagnosis

The diagnosis may be quite obvious; if symptoms appear long after extubation, the diagnosis may be delayed. If the lumen size is four mm. or less, dyspnea and wheezing may occur at rest and the patient may have difficulty raising secretions; with larger lumen size, symptoms may occur only with exertion. The most important aspect of diagnosis is "the index of

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suspicion," but indirect laryngoscopy, followed by an air-tracheogram, is needed. X-ray usually demonstrates the narrowing in the trachea. Tomograms may be helpful but dye studies are usually not necessary. The diagnosis is confirmed by tracheoscopy.

Prevention and Treatment

Obviously, the best therapy is prevention. The tracheostomy should be carried out under as ideal conditions as possible: an endotracheal tube in place, general anesthesia to control the otherwise struggling patient, a well illuminated operating room, and sterile conditions. A portion of the anterior tracheal cartilage should be removed for insertion of the tracheostomy tube, leaving smooth edges since irregular edges or loose cartilage fragments may lead to granuloma formation. Postoperatively, sterile techniques should be used in tracheostomy management. Humidity is important and the tube should fit comfortably without pressure. If a respirator is attached to the tube, care should be taken that the weight of the apparatus does not pull on the tube. Many types of tubes⁵ are now in use, but plastic tubes are replacing the metal type. The principle advantage here is the softer nature of the material and the superior one-piece tube-cuff. Recent experiments in dogs and in humans have demonstrated that allowing an audible leak around the tube is the most satisfactory way of minimizing cuff injuries.⁶ The idea that periodic deflation of the cuff would prevent complications has been shown to be incorrect. This minimal-leak technique is easier to accomplish with volume-controlled respirators than with pressure-controlled respirators. Studies in progress seem to show that low pressure tube-cuff systems will be available in the near future which will reduce further this complication.

Treatment

Many surgical procedures have been employed to handle this problem.^{2,7} Dilatation through a bronchoscope has resulted in only temporary relief while endoscopic resections have been of limited value in most cases. It is now felt that a direct attack is superior. If possible, the stricture is allowed to mature and the surrounding inflammatory reaction permitted to subside. The

surgical approach may be either cervicomediastinal, cervicothoracic, or a staged reconstruction, using skin grafts and supporting rings. If feasible, the cervicomediastinal approach is desirable since it avoids sternal splitting and thoracotomy and it avoids the direct exposure and handling of the anterior vasculature. Furthermore, it allows one to perform the entire procedure by extending the old tracheostomy incision.

This gives excellent exposure of the recurrent laryngeal nerves and permits a sleeve resection with end-to-end anastomosis. About four cm. of the trachea can be resected in this manner. Additional mobilization of the trachea can be accomplished by supra or infra-hyoid release and laryngeal suspension. If there is no tension on the suture line, the operation is completed in one stage. Should there be any doubt regarding tension, then the trachea should be exteriorized. This tracheo-cutaneous fistula can be closed later, frequently under local anesthesia. Postoperatively the patient's head is kept in flexion; no endotracheal or tracheostomy tube is necessary.

Case Reports

1 — A 22-year-old male, with a long history of malignant hypertension and associated chronic renal disease had a bilateral nephrectomy on January 10, 1974 at Newark Beth Israel Medical Center. He had been on chronic renal dialysis. His post-operative course was complicated by hypotension and fluid and electrolyte problems. A pulmonary infection resulted, so a tracheostomy was performed seven days postoperatively. An episode of gastrointestinal hemorrhage was treated conservatively, the patient improved and on January 22 the tracheostomy was removed. The patient did well over the next few weeks. On February 12, he developed an acute episode of hypotension and the tracheostomy was re-established at its previous site to maintain a controlled airway. The condition stabilized over the next 36 hours and the tracheostomy tube was removed. The patient did well and was finally discharged on March 1. Ten days later the patient was rushed to the hospital with severe dyspnea. Examination revealed an upper airway obstruction; rapid intubation with a narrow endotracheal tube was accomplished with difficulty. X-rays taken prior to intubation revealed a tracheal stenosis. (Figure 1)

On March 13, through a cervical-mediastinal incision, the tracheal stenosis was resected and end-to-end anastomosis was accomplished. At surgery the stenotic area measured about two cm. at the cuff site.

Postoperatively the patient did well. Subcutaneous emphysema developed about the neck and upper chest shortly after surgery, but resolved without surgical intervention. The patient was discharged on April 1 with satis-



Figure 1 — Tomogram of trachea showing area of stenosis

factory respiratory function. Approximately eight months later the patient died of complications relating to his underlying renal disease. At postmortem examination the area of the trachea was re-examined and found to have healed well with a patent lumen.

2 — A 19-year-old male had a splenectomy for congenital spherocytosis in 1969. A large mesenteric cyst was found at the time of surgery and drained. Six months later the patient was found to have cholelithiasis and a cholecystectomy was performed. He was admitted to the hospital again in April, 1971, with a three-week history of fever, anorexia and weight loss. He developed diarrhea, sepsis, and the clinical picture of an acute abdomen. At surgery a subphrenic abscess was drained. Postoperatively the patient developed renal failure and was transferred to Newark Beth Israel Medical Center for dialysis. Gastrointestinal bleeding added to this already complicated case and required a subtotal gastrectomy for a stress ulcer. The postoperative period was complicated by a severe pneumonia which necessitated assisted respiration. A tracheostomy tube was inserted on May 4 and remained in place until May 24. In July and in September surgery was necessary to drain hepatic and subhepatic abscesses. The patient recovered from these procedures and was finally discharged late in 1971. Over the next several months it was noted that he had developed exertional dyspnea and was having difficulty expectorating the normal secretions. It was thought that these problems were related to pulmonary fibrosis which had developed after his episode of pneumonia, but pulmonary function studies suggested severe obstructive changes. The patient was referred for laryngological examination when stridor was noted on exertion. At this time he had a tracheal wheeze on auscultation over the neck. Cervical x-rays showed the area of tracheal stenosis. (Figure 2) On tracheoscopy a circumferential stricture was noted in the trachea. On September 14, 1972 the patient underwent primary resection of the stenotic area of the trachea through a cervicomedial approach with end-to-end anastomosis. An area of stricture of approximately two cm. was removed. (Figure 3)

He did well postoperatively, was discharged within two weeks with normal pulmonary function studies, and continued to be asymptomatic two years after surgery.



Figure 2 — Anterior-posterior view of the trachea showing a simple air-tracheogram nicely demonstrating an area of stenosis.

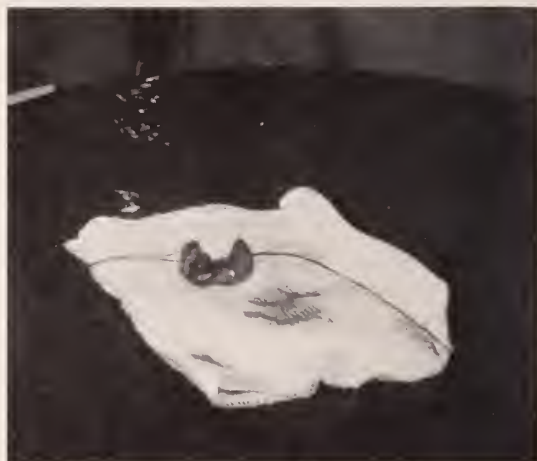


Figure 3 — Portion of resected trachea. This is a circumferential stenosis-cut opened.

3 — A 29-year-old male was admitted to Newark Beth Israel Medical Center in July 1974 with signs and symptoms of congestive heart failure related to rheumatic valvular heart disease. Following complete cardiac investigation, open heart surgery was performed with bi-valve replacement. The post-operative course was complicated by a complex cardiac arrhythmia and pneumothorax which necessitated reinsertion of a chest drainage tube. Paralytic ileus and wound dehiscence also developed and the patient needed closure of the wound in the operating room. Following this second procedure the endotracheal tube was left in place for 48 to 72 hours so that assisted positive pressure ventilation could be carried out. The patient's condition improved and he was discharged on August 22. On September 16, he was readmitted to the cardiothoracic service with dyspnea. Preliminary examination suggested tracheal obstruction which was confirmed by x-ray. Three days later, before a complete workup could be carried out, the patient went into

severe respiratory distress which required emergency tracheostomy. Later he was brought to the operating room for revision of this uncontrolled tracheostomy. At this time it was decided to explore the trachea and to attempt to resect the stenotic area. Findings at surgery suggested that a six to eight cm. long segment of trachea was involved.

Because of the previous thoracotomy and mediastinal surgery, mobilization of the trachea was difficult. It was not possible to resect this area with an end-to-end anastomosis thus the area of stenosis was exteriorized. Postoperatively the exteriorized trachea was allowed to heal around a "T" tube (Figure 4). The patient did well and was discharged on October 10.



Figure 4 — "T" tube in place. Long arm of the "T" protruding from the fistula site.

The plan at that time was to allow the exteriorized portion to contract down over the "T" tube and to have the proximal and distal arms of the tube act as a stent for the stenotic area.⁸ Should this have healed well, only closure of the tracheal-cutaneous fistula would have been required. Three months later the "T" tube was removed and the fistula allowed to contract down further. The patient did well until February 17, 1975 when he presented in acute respiratory distress. A tracheostomy tube was placed into the cutaneous fistula as an emergency procedure. Ten days later endoscopic examination revealed a circumferential subglottic stenosis just cephalad to the cutaneous-tracheal fistula. The stenotic area measured about two cm. (Figure 5).

On March 6, a primary tracheal resection with end-to-end anastomosis using laryngeal suspension was performed (Figure 6). Postoperatively the tracheal cutaneous fistula was maintained as a safety measure. The patient was tracheoscoped prior to discharge and the area of resection was healing well.

Over the next ten months the area of resection formed granulations which required repeated removal by endoscopic procedures. This unfortunate complication necessitated maintenance of the tracheal-cutaneous fistula. Further surgery may be necessary to reconstruct a patent tracheal lumen and allow closure of the tracheal-cutaneous fistula.



Figure 5 — Tomogram showing area of stenosis with slight dilated subglottic area above.



Figure 6 — Circumferential stenotic area resected.

Discussion

Each of the three patients was a young male who was severely debilitated by underlying chronic illness and who had endotracheal injury produced by tracheostomy and/or an endotracheal tube needed during a period of pulmonary and/or cardiovascular compromise. In two cases symptoms related to the tracheal stenosis occurred shortly after the patient was discharged from the hospital. In case two, however, there was a rather long period in which symptoms gradually occurred and the diagnosis was delayed.

The importance of thorough investigation with radiographic and tracheoscopic investigation to delineate the exact location and extent of the lesion is dramatically scored in case three. Here, both types of tracheal stenosis are seen, i.e., circumferential stricture and tracheal "malacia." The second type can be treated effectively by a stent and may heal with a perfectly satisfactory tracheal airway. Tight circumferential strictures, on the other hand, must be resected. Had this been appreciated in case three the exteriorization procedure may not have been necessary.

This patient also developed problems with excessive granulations at the site of resection.

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7:15 a.m. — Sunday, May 15, 1977

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preceding

AMA Issues Workshop



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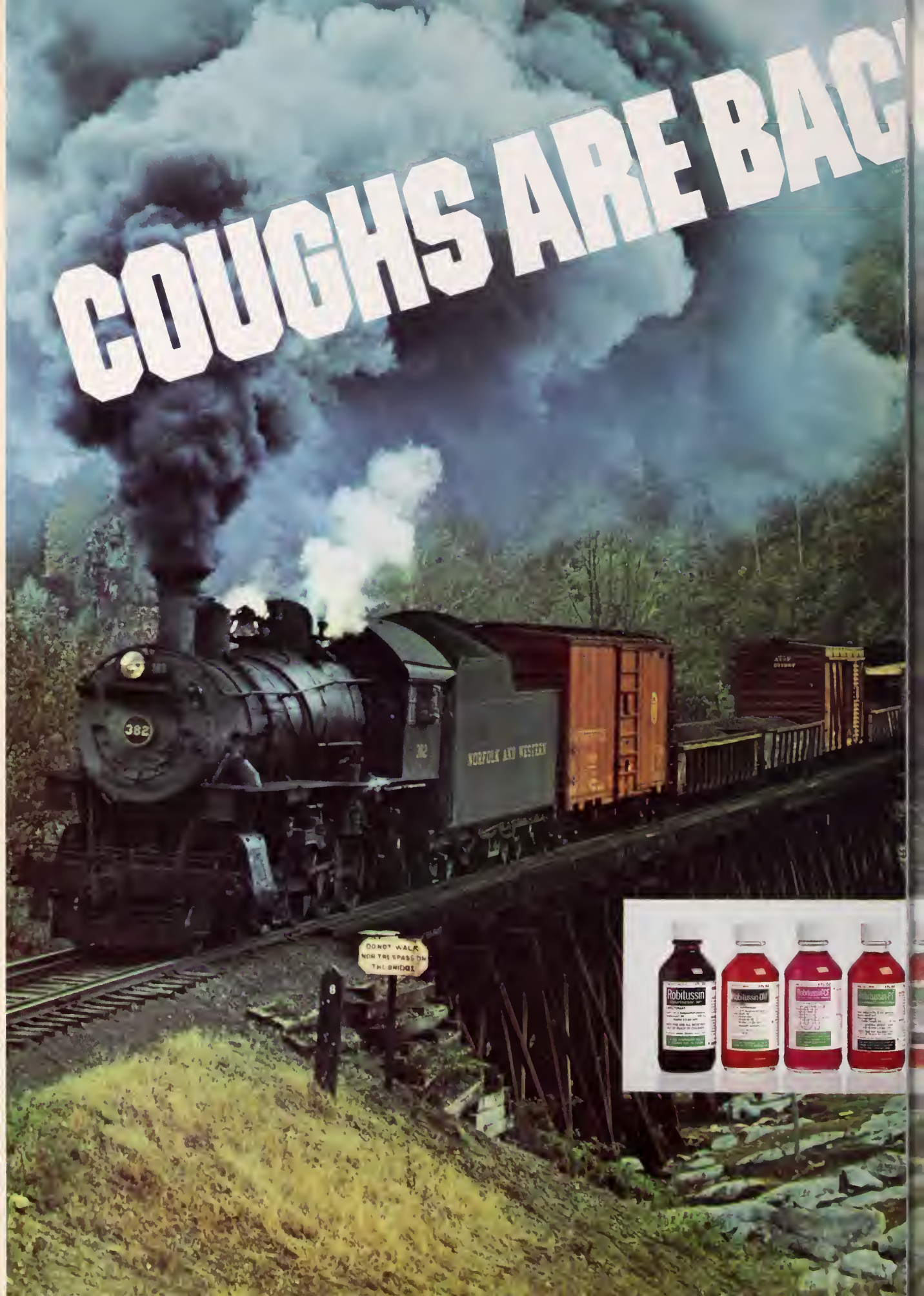
Kaolin	6.0 g
Pectin	142.8 mg
Hyoscyamine sulfate	0.1037 mg
Atropine sulfate	0.0194 mg
Hyoscine hydrobromide	0.0065 mg
Powdered opium, USP	24.0 mg
(equivalent to paregoric 6 ml.)	
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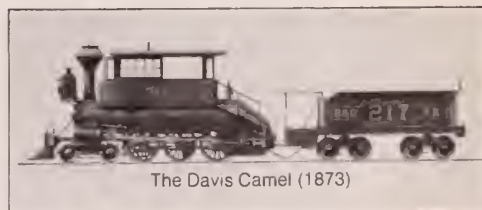
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clear stuffy noses and sinuses. Non narcotic.

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For many years Robins has spotlighted the expectorant action of the Robitussin cough formulations by featuring action photographs of steam engines like the one on the preceding page. In keeping with this tradition, last year the company commissioned a well-known illustrator to render full-color drawings of several classic locomotives . . . accurate to the minutest detail. Chances are you requested and received the first locomotive in this series, The William Mason, last winter. Now, the second one is available. (See below). To order your print suitable for framing, write "Robitussin Clear-Tract Engine #2" on your Rx pad and mail to "Vintage Locomotives," Dept. T4, A. H. Robins Company, 1407 Cummings Drive, Richmond, Va. 23220.



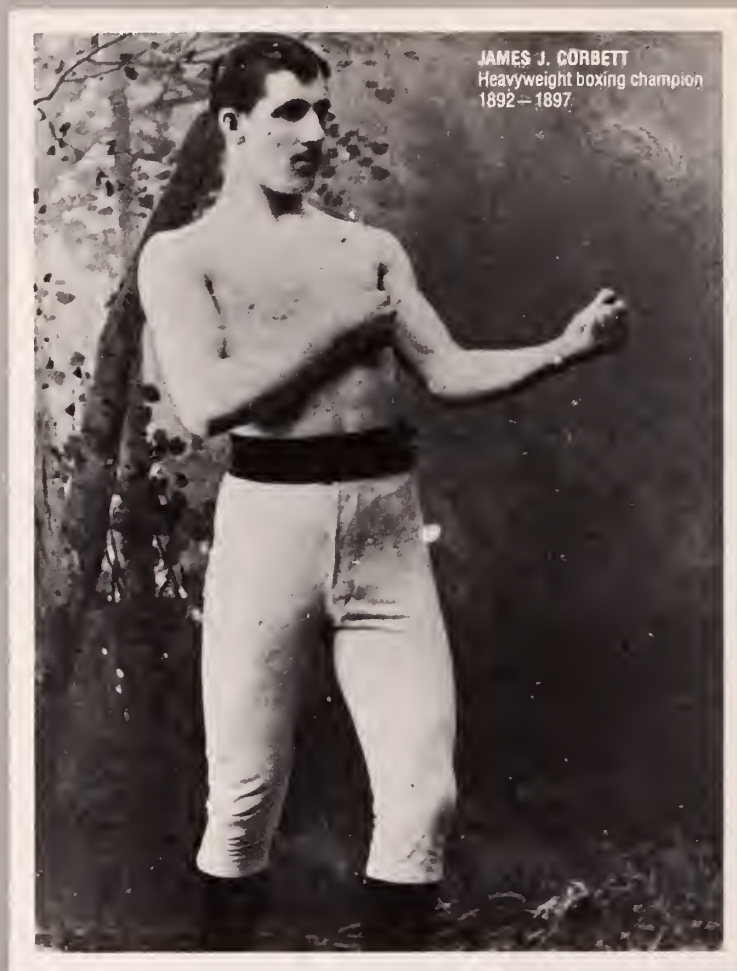
The Davis Camel (1873)

UR PHOTO: Norfolk & Western Branch Train
No. 202 west bound near Alvarado, Va. (Oct., 1956).
This line reaches the highest point of any railroad
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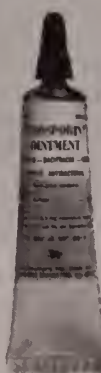
Provides overlapping, broad-spectrum antibacterial action to help combat infection caused by common susceptible pathogens (including staph and strep).

Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated) for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing. **CONTRAINDICATIONS:** Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to



neomycin, care should be exercised when using this product in treating burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body is affected, especially if the patient has impaired renal function or is receiving aminoglycoside antibiotics concurrently, not more than one application is recommended. **PRECAUTIONS:** As with other antibacterial preparations, use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the literature indicate an increase in the prevalence of persons allergic to neomycin. Toxicity and nephrotoxicity have been reported (see Warning section). Complete literature available on request from Professional Services Dept.



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CASE REPORTS

Hypercalcemic crisis in a patient with parathyroid carcinoma has been presented. Emergency exploration of the neck and extirpation of the tumor were done with dramatic results. Basic diagnostic features of this entity were reviewed.

Hypercalcemic Crisis in Parathyroid Carcinoma*

**George O. Halsted, M.D. and
Emil L. Suzara, M.D., Englewood**

Malignant tumors of the parathyroid gland are rare compared to parathyroid adenomas and they infrequently cause primary hyperparathyroidism. Parathyroid malignancy is estimated at four percent of all cases of primary hyperparathyroidism.

Case Report

A 73-year-old female was admitted to the Englewood Hospital in September 1974, with the chief complaint of staggering gait. She had a two-week history of progressive body weakness; drowsiness and incoordination, and marked ataxia of gait. Her past history revealed transient weakness of the right side of the body a year prior to admission, which lasted for two days and cleared spontaneously. The patient also had a marked hearing loss for about five years prior to admission, for which she wore a hearing aid. Hypertension was controlled with medication since 1949. Family history revealed that the patient's mother died of carcinoma of the uterus and her father died of tuberculosis.

On admission, the physical examination revealed a right-handed asthenic female who appeared drowsy. Vital signs showed blood pressure of 210/100; temperature was 99; pulse rate 92; and respiration 24; body weight was 124 lbs. The neck was supple. There was fullness of the thyroid on palpation, but no bruit. Her lungs were clear on auscultation. The heart disclosed a grade II ejection systolic murmur at the apex. The abdomen was soft and non-tender. Neurological examination revealed that the patient was oriented to place but not to time. She had marked hearing loss. Cranial nerves exhibited diminished convergence on the right. The face was symmetrical, but there was a right hemiparesis. Disturbed coordination was demonstrated by finger-to-nose testing on the right side. Plantar stroke testing showed extension on the right side and flexion on the left side. Gait was wide-based with a tendency to fall to the right.

The differential diagnosis at the time of admission was brain stem stroke, cerebello pontine angle tumor or subfrontal tumor. Urinalysis revealed 2+ protein. Serum potassium was 2.6; Na 140; Hgb 14; WBC 11,900 with 42 polys and

28 lymphocytes. The SMA 12 revealed a serum calcium of 15, inorganic phosphorous 1.9, glucose 105, BUN 16, uric acid 9.9, total bilirubin 1.6, and alkaline phosphatase 100. Total protein, albumin, LDH, and SGOT were within normal limits. Sedimentation rate was 13 mm.

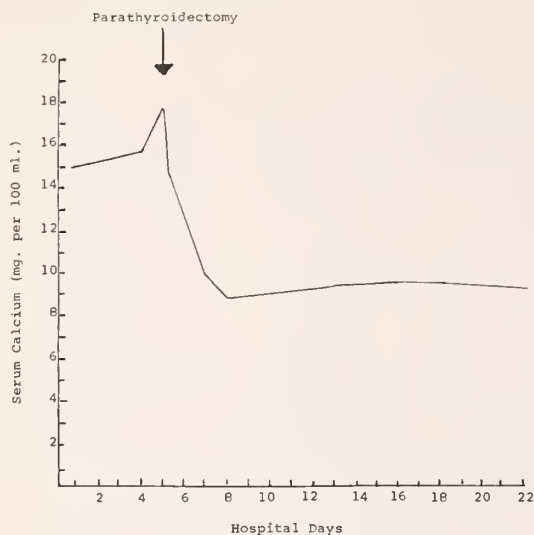
Radiologic studies included a negative chest x-ray, skull series, and flat plate of the abdomen. A right brachial carotid arteriogram showed diffuse arteriosclerotic disease intracranially with cerebral atrophy, but no filling of the posterior circulation. Electrocardiogram revealed prolongation of the QT interval. EEG showed generalized slowing and disorganization consistent with diffuse cerebral dysfunction.

The patient progressed from drowsiness to stupor. Serum calcium on the fifth hospital day was 18 mg/dl and the phosphorous was 2 mg/dl. A surgical consultant suspected parathyroid adenoma with hypercalcemic crisis, so surgical exploration of the neck was done. A reddish brown ovoid shaped tumor 1.5 x 1 cm. in diameter, behind the left thyroid and the superior aspect, was extirpated. Exploration of the right thyroid revealed a larger ovoid brownish mass measuring 3 x 2 x 1.2 cm. The tumors were not adherent to the surrounding tissue and there were no suspicious lymph nodes. Two normal looking parathyroid glands were identified.

Two hours postoperatively the patient was awake, responsive, and moving all extremities. The serum calcium was 14.7 mg/dl and progressively went down to a normal level on the third postoperative day. The patient developed a positive Chvostek sign on the fifth postoperative day with a serum calcium of 7.2 mg/dl. She was then started on supplementary calcium and was fully alert when discharged on the 17th postoperative day.

The right parathyroid tumor was reddish brown in color with a light grey area on the surface. The gray area was nodular in configuration. On section, there appeared to be multiple greyish white nodes varying from 0.5 to 1.5 cm in diameter. The parathyroid tumor from the left had a nodular surface measuring 1.5 x 1 x 0.8 cm with some fibrous connective and adipose tissues attached. On section, it was greyish-white and there was a cystic area measuring 0.4 cm. The cyst contains a brownish colloid-like material. Histologic section of the tumor showed trabecular pattern, rare mitosis, thick fibrous bands, and capsular invasion.

*This case report is from the Englewood Hospital, Englewood, New Jersey where Dr. Halsted is Chief of the Department of Surgery and Dr. Suzara was, at the time, Chief Resident in Surgery and attending physician.



COURSE AND TREATMENT IN A
CASE OF PARATHYROID CARCINOMA

Comment

Since it was first described by Meyer⁶ in 1939, there have been few cases of parathyroid carcinoma reported in the literature. The last extensive review of 70 cases was made by Schantz and Castleman¹ in 1972. Presenting signs, in descending order of frequency, were bone disease, palpable neck mass, urolithiasis, renal disease, pancreatitis, and weakness. Seventy-five percent of the cases with parathyroid carcinoma had serum calcium levels of 14 mg/dl or higher; only ten percent had serum calcium levels of less than 13 mg/dl. Parathyroid carcinoma should be suspected when (1) a palpable cervical mass is associated with hypercalcemia, (2) hypercalcemia appears with vocal cord paralysis, and (3) hyperparathyroidism recurs several months following operation on the parathyroid. The presence of fibrous inflammatory-like reaction around the tumor is a very important diagnostic finding at operation.

The principal histologic features of the disease are the presence of mitotic figures, lymph node metastases, and capsular and blood vessel invasion. Other important findings are the presence of trabecular pattern and thick fibrous bands. The diagnosis of parathyroid carcinoma often has been made retrospectively after local recurrences or distant metastases appear following operation. Because of the very high mortality in acute hyperparathyroidism, immediate and thorough cervical exploration is indicated. Identification of at least four parathyroid glands is necessary. Exploration of the mediastinum is indicated if the lesion cannot be found in the neck. Parathyroid carcinoma tends to recur after initial surgery, and excision of recurrence is indicated to control the metabolic effect of hypercalcemia. Selective venous catheterization and radioimmunoassay of parathyroid hormone recently have been shown to be of importance in assessing the spread of parathyroid carcinoma, to facilitate the area of search and to reduce operative complications.

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2 Dean Drive, Tenaflly

The clinical manifestations of tricyclic poisonings are reviewed in a case report. The efficacy of physostigmine salicylate in reversing the cardiac and neurological disturbances was striking. Past literature has been scanty in demonstrating reversal of cardiotoxicity with physostigmine. In view of the life-threatening potential of the conduction defects that can be caused by the tricyclic compounds, we feel that physicians should use physostigmine for treatment of this problem.

Reversal of Imipramine Cardiotoxicity with Physostigmine*

**Michael J. Rushnak, M.D. and
Daniel P. McGovern, M.D.,
Princeton**

The availability of the tricyclic compounds for treatment of depression and enuresis has led to their use in a significant number of suicide attempts.¹ In this report, we emphasize the clinical presentations and treatment of these overdoses which had a 50 percent mortality in one report.² The atropine-like side effects of these drugs were described well by Burks, *et al.*³ These include mydriasis, urinary retention, tachycardia, and the more life-threatening complications of coma, cardiac arrhythmias, and cardiac-conduction disturbances. It is these central manifestations that call for prompt recognition and vigorous treatment.⁴ The benefits of physostigmine as an antidote for tricyclic poisonings has been known since the early 1960's; however, the evidence that it will reduce the cardiac effects has been scanty. The electrocardiographic changes, which were first described by Rasmussen,⁵ include bundle branch block, atrio-ventricular block, extrasystoles, and non-specific ST segment and T wave changes.⁵ Our experience with one patient illustrates the reversal of imipramine-induced cardiotoxicity with the use of physostigmine salicylate.

Case Report

A 30-year-old woman weighing 45 kilograms was brought to the emergency room of the Medical Center at Princeton in a comatose state. Her mother stated that she found the patient unconscious with a suicide note beside her. The patient was being treated with diphenhydantoin and diazepam for a seizure disorder but these medications were unlikely culprits as they were renewed earlier that day and both bottles were full. Further history revealed a year-long depressive state that had required hospitalization, but no additional medical disorders nor ingestion of other drugs.

Initial physical examination revealed a thin, pale, woman who was unresponsive to painful stimuli. The patient was afebrile with a regular pulse of 100, blood pressure 90/70, and unlabored respirations with a rate of 20/minute. There were no signs of trauma and the breath odor was unremarkable. Pupils were equally dilated to eight mm and reacted to light. Ocular fundi were normal. The neck was supple. There was a regular cardiac rhythm with a rate of 100/minute; no thrill or murmur was noted. The chest was clear to percussion and auscultation. Neurological findings included an equivocal gag reflex, myoclonus of the legs, and alternating flaccidity and rigidity of both lower extremities. Deep tendon reflexes were hyperactive. There were no pathological reflexes.

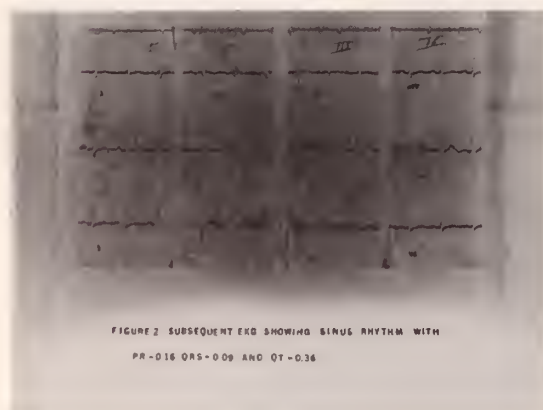
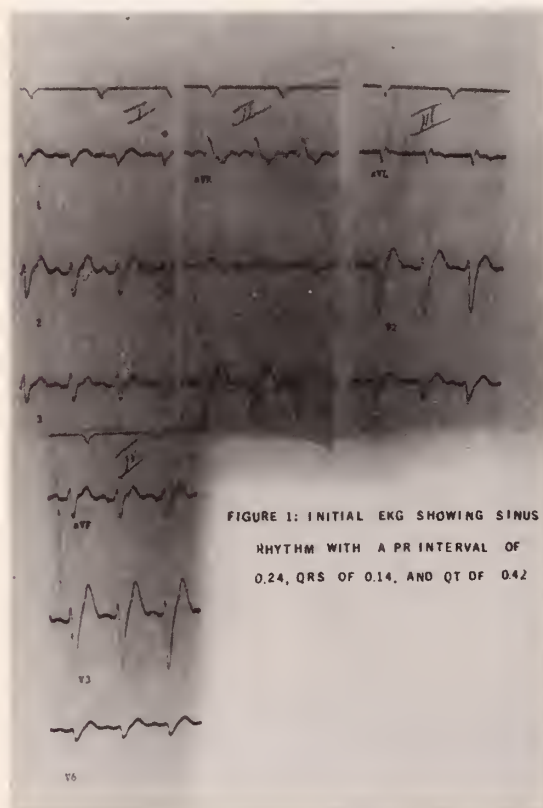
Toxicology screening for alcohol, barbiturates, and salicylates was negative. Complete blood count, electrolytes, and SMA[®] chemistries were within normal limits. The electrocardiogram revealed sinus tachycardia at 100/minute, a P-R interval of 0.24 seconds, and a right bundle branch block with a QRS duration of 0.16 seconds. (Figure 1)

Because of the history of depression and the findings of tachycardia, mydriasis, myoclonus, and cardiac conduction disturbances, the diagnosis of tricyclic poisoning seemed likely. The patient was admitted to the intensive care unit. There were no changes in the patient's condition with conservative management in the first two hours. An intravenous bolus of two mg of physostigmine salicylate was administered and within three to four minutes the patient opened her eyes and tried to speak. At the same time the QRS complex on the cardiac monitor narrowed to 0.09 seconds. The electrocardiogram in Figure 2 was taken eight hours after the one in Figure 1, but the changes were seen on the cardiac monitor within minutes by all observers when physostigmine was first given. Over the next hour, the level of consciousness waned and the QRS began to lengthen and an additional dose of two mg of physostigmine was given. A dramatic response occurred within five minutes and the patient sat up and was lucid; she stated that she had taken one hundred 25 mg imipramine tablets.

The patient required an additional four mg of physostigmine over the next eight hours to keep her from lapsing into coma and to keep the QRS interval within normal range. In the first twelve hours, fluid intake was 6,540 ml and urine output 3,120 ml. In the next 24 hours, the intake/output respectively were 3,850 ml and 5,075 ml. Diuretics were not needed. Cardiac monitoring was continued for five days

*From the Medical Center at Princeton, an affiliate of CMDNJ-Rutgers Medical School, Piscataway.

but subsequent electrocardiograms on the succeeding hospital days were within normal limits. The patient was seen by a psychiatrist who advised further psychiatric care.



Discussion

The cardiac conduction abnormalities induced by toxic doses of imipramine require immediate therapy because of their life-threatening potential. The demonstrated efficacy of physostigmine in reversing such events in imipramine poisonings makes it a valuable antidote. The side effects of physostigmine, such as bradycar-

dia are infrequent and can be corrected with proprantheline bromide. Our experience coincided with that of Rumack who noted the maximum action of physostigmine to be within five minutes and the duration 60 to 90 minutes.⁶

The amount of drug ingested by our patient was greater than the minimal lethal dose of 30/mg/kg as reported by Goel, *et al.*⁷ Matthew and Lawson have found that the severity of poisoning is largely related to the individual's tolerance and that the severity should be judged by the clinical findings rather than the alleged dose.⁸ Blood and urine levels do not indicate severity, but are helpful in establishing a biochemical diagnosis.⁹

Steele, *et al.*, has reported that the amount of tricyclic compound and metabolites recovered in the urine and blood is so small that dialysis and forced diuresis are ineffectual.¹⁰ These drugs quickly are bound to tissue and only minimally are bound to serum proteins. Furthermore, their effects sometimes manifest themselves as long as six days after ingestion.¹¹ We attempted forced diuresis, in addition to physostigmine, in view of the rewarding experience of Asbach and Schuler.¹² Simple gastric lavage was employed although the benefits of activated charcoal have been reported.¹³

Coma is a common clinical problem whose differential diagnosis should include the toxic encephalopathies. The usual lack of focal findings is particularly troublesome,¹⁴ but the diagnosis of tricyclic poisoning should be entertained when a patient suspected of drug overdose presents with coma, mydriasis, tachycardia, myoclonus, and cardiac conduction disturbances.

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Medical Center, Princeton

Diabetes Research Funds Available for 1977-1978

Latest government statistics now rank diabetes as the third leading cause of death. This year, too, it will afflict another 600,000 people—and drain our economy of more than \$5 billion in health care, disability payments, and lost wages.

Next year the prospects are even worse because right now we can control only the disease—not cure it. And until we find more answers, diabetes will continue to be the leading cause among new cases of blindness, and a major cause of heart attack, stroke, kidney failure, gangrene, and nerve damage.

But through expanded research the chances of

finding successful therapeutic approaches to reduce and arrest the complications and, ultimately, cure the disease itself are excellent.

The Juvenile Diabetes Foundation provides funds for direct research. Grant applications are now being accepted for the funding year 1977-78. Applications may be obtained from the Grant Administrator, Juvenile Diabetes Foundation, 23 East 26th Street, New York 10010, telephone (212) 689-7868. Completed applications must be postmarked not later than March 1, 1977. Approved grants will be funded beginning September 1, 1977.

When **impotence** due to
androgenic deficiency
is driving them apart



Android-5 Buccal
Tabs
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Tabs
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Tabs

Methyltestosterone U.S.P. – 5, 10, 25 mg.

New Double-Blind Study ANDROID-25 vs. Placebo*

* WRITE FOR REPRINT: R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioglu, M.D. Hormones for Improved Sexuality in the Male and Female Climacteric. *Drug Therapy*, Sept. 1976.

Is there a true aphrodisiac? How effective are androgens in the management of the male climacteric and male impotence? Article discusses the psychophysiological and hormonal changes in the elderly male and female and therapeutic considerations. The effectiveness of methyltestosterone in the management of male impotence was confirmed by a cross-over, double-blind study using a placebo and Android-25

(methyltestosterone 25 mg.), on 20 males, 50 years of age or older who complained of secondary impotence. Patients received a series of placebo then Android-25, or Android-25 then placebo as follows: 1 tablet/30 days; 2 tablets/30 days; 3 tablets/30 days. Sexual response was evaluated: 0 = no change, + = 25% improvement, ++ = 50% improvement, +++ = 75% improvement. Placebo effectiveness was + or ++ in 12.7% of trials. Android-25 elicited a +, ++ or +++ response in 47.2% of trials. There was often a dose related response not observed with the placebo. This effect was not observed in younger patients (age 28-45 years).

DESCRIPTION: Methyltestosterone is 17 β -Hydroxy-17-Methylandrosta-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunuchism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgen deficiency. 4. Post-pubertal cryptorchidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric

avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE**

REACTIONS: Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. In the male: Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpubertal cryptorchidism, 30 mg. **REFERENCE:** Robert B. Greenblatt, M.D., and D. H. Perez, M.D.: "The Menopausal Syndrome," *Problems of Libido in the Elderly*, pp. 95-101. Medcom Press, N.Y., 1974. **HOW SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

An examination of the current status of health education in the New Jersey public schools reveals wide disparity in the ratio of health teachers to students enrolled. Surveys of school populations disclose marked deficiencies in health knowledge and increasing trends in teenage smoking and drinking, thus emphasizing the need for more effective health education. A physician survey indicates that only a small number of practitioners are involved in school health education programs. Research is proposed to gain a greater understanding of the potential impact of various approaches to health education.

Health Education in New Jersey Public Schools

Marvin A. Lavenhar, Ph.D., Newark*

The major advances in the medical sciences in the twentieth century have generated a substantial source of information which can be used to improve individual and community health. However, health education, which is still in its inchoate stages as a scientific discipline, has been struggling to keep pace with these dramatic advancements in health knowledge. It has been only partially effective in imparting new knowledge to the public, and has been even less successful in effecting positive changes in health-related attitudes and behavior.

School health education strives to prepare future adults to live a healthful life style, where health is defined as a state of complete physical, mental, and social well-being and not merely the absence of disease. It is generally agreed that health education is likely to be most effective when integrated with the school curriculum at the onset of the educational process so that positive health attitudes and behavior can be established at an early age.

There is considerably less agreement on how health education programs should be conducted in the schools to achieve the desired objectives. The traditional approach to school health education assumes that communication of information is the first phase of a continuing process that flows from knowledge acquisition to attitude change and results in behavior modification. However, it is becoming more and more apparent that the relationships among knowledge, attitudes, and behavior are not simple or consistent, and to affect changes in behavior,

health education programs must do more than provide information. Educators are striving to develop a more meaningful overall educational experience which will focus upon preparing future adults to face a variety of problems and decisions throughout life, including those pertaining to health-related behavior.

Further complicating the process of formulating health education programs, and evaluating their effectiveness, are a wide range of variables which readily can affect the impact of educational efforts. Some of these include:

1. The characteristics (charisma, capability) of the educators.
2. The type of approach or delivery and the message content. (scare tactics, didactic lecture, entertainment approach, and so on).
3. The medium of communication (audio-visual, written material, face-to-face).
4. The scheduling of health instruction (one period per week, block scheduling, integrated instruction).
5. The characteristics of the target population (age, sex, socio-economic status).
6. The immediate and long-range educational goals.
7. The influence of parents and the peer group.
8. The influence (positive or negative) of the mass media.

*Presented in part at the Second Annual Governor's Conference on Primary and Secondary Prevention in Adult Medicine, 210th Annual Meeting of The Medical Society of New Jersey, Cherry Hill, June 5, 1976. Dr. Lavenhar is Associate Professor and Director, Division of Biostatistics, New Jersey Medical School, CMDNJ.

Many approaches to health education have been tried, but few have been tested in a rigorous or controlled way. Fad and fashion largely dictate the choice of most school health education programs. This state of affairs is likely to continue until we are able to gain greater understanding of the underlying factors which determine the effectiveness or ineffectiveness of our health education efforts.

School Health Education in New Jersey

What is the current status of school health education in New Jersey? A definitive answer to this question is not possible at this time, but we can piece together some of the observations and studies made during the past few years to indicate what is being accomplished by school health education programs.

1. School Health Education Legislation

In New Jersey, health education legislation dates back to 1894 when a law was passed requiring instruction on the harmful effects of alcohol and narcotics. It appears that little progress in legislation has been made since then. New Jersey legislation which affects the school education curriculum may be summarized as follows:

- a. All public schools are required to conduct courses in health, safety, and physical education which shall be adapted to the ages and capabilities of the pupils.
- b. The minimum requirement of time for teaching health and safety *plus* physical education is two and a half hours per week.
- c. As of January 15, 1971, each school district is required to incorporate into its seventh through twelfth grade health education curriculum a drug education unit covering a minimum of ten clock-hours per school year.
- d. The Commissioner of Education is required, *from time to time*, to prepare, publish, and distribute handbooks, materials, or circulars for the guidance of teachers in the public schools.

Thus, aside from the minimal drug education requirement, there are no minimum requirements for teaching health education *per se* in the New Jersey public schools. In a reference manual for teachers¹ published by the New Jersey State Department of Education, it is stated that a minimum time allotment for classroom

instruction in health is one period per week throughout the year, and schools are encouraged to schedule additional periods per week. However, the State Board of Education serves in an advisory capacity to the local school boards which individually formulate the health education curriculum for their district.

In May, 1976, a bill was introduced in the State Senate which would require the establishment of a comprehensive health education program in all public schools from kindergarten through the twelfth grade. Among the health concerns included in the program would be mental and emotional health, drug and alcohol abuse, personal health and hygiene, venereal disease and other communicable diseases, nutrition and food management, developmental disabilities, environmental health, and consumer health. The specific details of the proposed legislation are not yet available; it is not clear whether any funds have been allocated for training and evaluation. A comprehensive approach to school health education in New Jersey is long overdue.

2. Teacher-Student Ratios by County

The minimal mandated requirement for the teaching of health education in New Jersey public schools has resulted in a wide disparity in the employment of health teachers in the State's 21 counties. From Table 1 we see that, on the average, the counties employed 21 health teachers (including physical health) per 10,000 students enrolled. This ratio ranged from a low of 19/10,000 (Hudson County) to a high of 56/10,000 (Atlantic County). In Table 2, the physical health teachers are excluded, yielding an average of ten health educators and nurses teaching health per 10,000 enrolled students, with a range from 5/10,000 in four counties (Mercer, Monmouth, Ocean, and Passaic) to 21/10,000 (Atlantic County).

Table 3 provides a different perspective by describing the variability among counties in the proportion of health teachers employed in the public schools who are primarily health educators or nurses (rather than physical health teachers). In the average county approximately

Table 1

County Distribution of the Number of Health Teachers Per 10,000 Students Enrolled in New Jersey Schools

<i>Teachers/10,000 Students</i>	<i>No. of Counties</i>	<i>% of Total</i>
Less than 20	1	5
20-24	3	14
25-29	6	28
30-34	2	10
35-39	4	19
40-44	3	14
45 or more	2	10
Total	21	100
Median = 31	Range = 19 to 56	

Table 2

County Distribution of the Number of Health Educators and Nurses Teaching Health Per 10,000 Students Enrolled in New Jersey Schools*

<i>Teachers/10,000 Students</i>	<i>No. of Counties</i>	<i>% of Total</i>
Less than 5	0	0
5-8	8	38
9-12	6	28
13-16	4	19
17-20	2	10
20 or more	1	5
Total	21	100
Median = 10	Range = 5 to 21	

*Health teachers who are primarily health educators

one-third (31 percent) of the health teachers are primarily health educators or nurses. The proportion varied from a low of 16 percent (Ocean County) to a high of 65 percent (Warren County).

It should be emphasized that the teacher-student ratios do not yield any information about the content and quality of the educational programs offered. They do, however, clearly indicate a wide disparity in interest and emphasis placed upon health education in the 21 New Jersey counties.

Table 3

County Distribution of Percentage of Health Teachers in New Jersey Schools Who Are Primarily Health Educators or Nurses

<i>Percent Health Educators or Nurses</i>	<i>No. of Counties</i>	<i>% of Total</i>
Less than 20%	3	14
20-29%	7	33
30-39%	6	29
40-49%	2	10
50% or more	3	14
Total	21	100
Median = 31%	Range = 16% to 65%	

Table 4

Responses to Health Knowledge Questionnaire

<i>Subject</i>	<i>Questions</i>	<i>Grade 9</i>			<i>Grade 12</i>		
		<i>G</i>	<i>F</i>	<i>P</i>	<i>G</i>	<i>F</i>	<i>P</i>
Chronic disease	9	1	1	7	1	1	7
Mental disease	7	0	1	6	0	3	4
Alcohol, tobacco, drugs	6	1	2	3	1	2	3
Nutrition	6	0	2	4	1	1	4
Infectious disease	5	0	2	3	2	2	1
Human reproduction	5	1	2	2	1	3	1
Venereal disease	4	1	0	3	3	1	0
Medications	4	2	1	1	2	2	0
Dental health	3	1	0	2	1	0	2
Miscellaneous	15	2	1	12	2	3	10
Total	64	9	12	43	14	18	32
Percent		14	19	67	22	28	50

G = Good; F = Fair; P = Poor

3. Health Knowledge

The initial objective of any school health education program is to impart knowledge which hopefully can be translated into positive health attitudes and practices. In 1972, a 64-item health knowledge questionnaire was administered to ninth and twelfth grade students in a large New Jersey city to ascertain the extent to which these students were informed about a variety of health subjects. The summary of responses in Table 4 suggests a low level of health knowledge in most of the subject areas covered. Among ninth graders, two-thirds of the questions elicited poor responses (defined as less than 60 percent correct); among twelfth graders, one-half of the questions were answered poorly. It is likely that there are major deficiencies in the level of health knowledge acquired by our youth, particularly in the large urban centers.

4. Health Practices

The ultimate objective of any school health education program is to affect health-related behavior in a positive way. The teenage drug abuse epidemic of the late 1960's was met with

a massive drug education program which may have contributed to the leveling off and reduction in the use of narcotics and other dangerous drugs by teenagers in the early 1970's. However, our recent follow-up surveys of drug use in selected suburban New Jersey populations revealed two persistent negative trends. Despite the fact that most school health programs focus upon the effects of tobacco and alcohol, regular cigarette smoking appears to be increasing among female teenagers, and regular consumption of alcoholic beverages, particularly beer,

seems to be gaining popularity among teenage males. For example, in one suburban community in northern New Jersey, the proportion of regular cigarette smokers (10 or more per day) among tenth grade females increased from 8 to 21 percent between February 1970 and April 1974 (Figure 1); and the proportion of regular beer drinkers (at least once per week) among male twelfth graders increased from 24 to 58 percent between November 1972 and April 1974. (Figure 2).

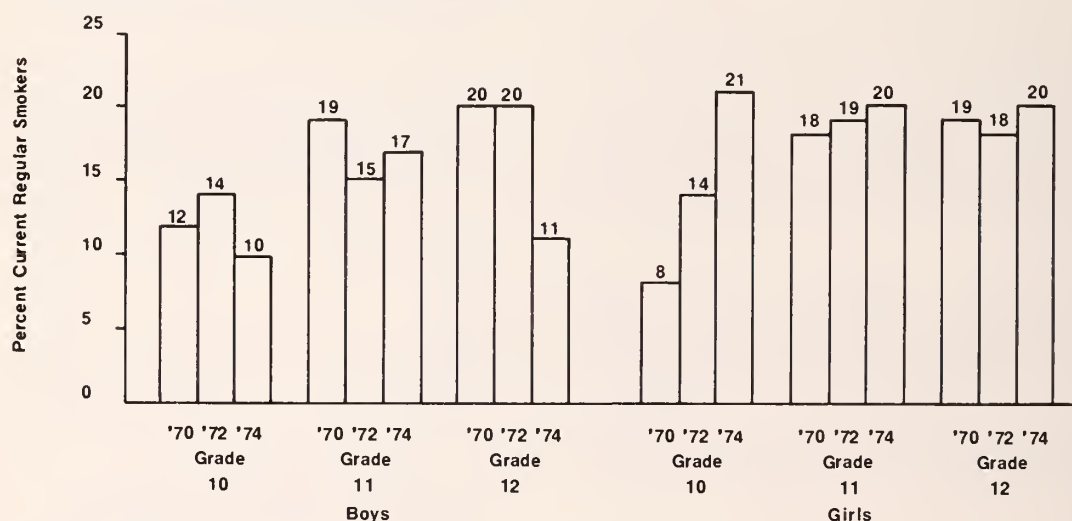


Figure 1—Reported proportion of regular cigarette smokers (10 or more per day) in one suburban New Jersey high school, by grade and sex, February 1970, November 1972, and April 1974.

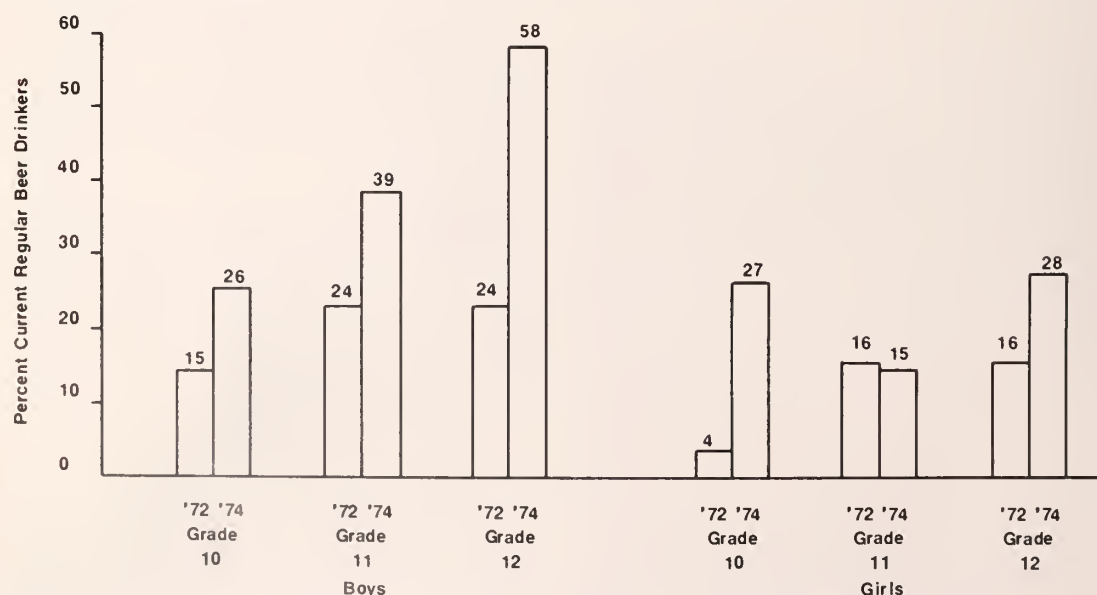


Figure 2—Reported proportion of regular beer drinkers (at least once/week) in one suburban New Jersey high school, by grade and sex, November 1972 and April 1974.

It is of interest to note that the lowering of the legal drinking age to 18 in New Jersey in 1973 has been followed by an increase in teenage drinking; in addition a high rise in the number of alcohol-related arrests of young automobile drivers has been reported by the Uniform Crime Reporting Section of the New Jersey State Police. Continued surveillance is essential in order to determine whether or not the arrest statistics denote a real problem or an artifact caused by changes in law enforcement and/or reporting procedures. The implications are important considering the fact that our attitudes are becoming more permissive with respect to both teenage drinking and the use of cigarettes, marihuana, and other drugs by young people. These attitudes, not only influence restrictive legislation, but also dictate, to a large degree, where the emphasis is placed in substance-abuse prevention programs.

The fact that venereal disease in teenagers reached epidemic proportions in New Jersey in the early 1970's is yet another indication of the ineffectiveness of preventive education in the public schools. It is difficult to assess trends in the incidence of venereal disease. The marked increase in the number of cases reported in the past decade may be attributed to improved surveillance and reporting procedures. Nevertheless, in 1975 more than 5000 new cases of gonorrhea or syphilis in youngsters between the ages of 15 and 19 were reported to the New Jersey State Department of Health². The reported cases constitute approximately two percent of the population aged 15-19 and represent an unknown proportion of the total number of cases including those that are undiagnosed or unreported.

The Role of the Physician

How involved is the medical profession in school health curriculum development and programing? A questionnaire designed to answer this question was placed in the March 1976 issue of *The Journal of The Medical Society of New Jersey* (p. 252) and in a subsequent Medical Society bulletin, and was completed and returned by a cross-section of more than 200 physicians practicing throughout the State. Only 13.5 percent of the respondents indicated

some involvement in school health curriculum development and 26 percent contributed to school health education programs. Since the respondents are likely to be more motivated and involved than the non-respondents, the rate of participation in school health development and planning among practicing physicians throughout the State is probably lower than among the responding physicians. It appears that the practicing physician, an important health education resource, is not being utilized to his full potential in school health education programs.

To what extent will teenagers turn to their private physician for information and advice on health matters? Recent drug-use surveys of secondary school students conducted by the Department of Preventive Medicine of the New Jersey Medical School in three suburban New Jersey communities disclosed that only 12 percent of the junior high school respondents and 15 percent of the senior high school respondents considered their private physician to be their most valued source of information and advice on drugs (Table 5). Among the multiple drug users, while only 13 percent would seek information and advice initially from their private physician, almost one-half (46 percent) would seek help from an ex-addict, a classmate, or a friend. Less than 3 percent of the survey respondents indicated that they would turn to a school teacher or guidance counselor as their primary source of information and advice. We therefore have a situation where teenagers are likely to seek assistance on drug-related matters

Table 5
Most Valued Student Sources of Information and Advice on Drugs in Three Suburban New Jersey Communities

Most Valued Source	Jr. H.S.	Sr. H.S.	Mult. Drug
	Total %	Total %	Users %
Classmate or friend	6	11	15
Parent	19	7	2
Sibling	7	5	8
Clergyman	2	2	1
Teacher or counselor	3	3	1
Ex-addict	14	24	31
University professor	13	14	10
Private physician	12	15	13
None of above	2	4	7
Don't know	22	15	12
Total Responses	707	2426	461

from their generally misinformed peer group rather than from knowledgeable professionals.

Directions for the Future

In the absence of mandated, structured instruction programs, New Jersey has adopted a crisis approach to health education in the schools, with the focus moving from sex education to drug abuse education and, of late, to environmental health³. Health educators have long decried the short sightedness of this crisis approach and support a comprehensive, unified, structured program of health instruction from kindergarten to the twelfth grade.

At its meeting on May 2, 1973, the New Jersey State Board of Education approved a resolution that was designed to give health education a higher priority in the school program. The resolution basically recommended the development of sequential curriculum guides in health education, that health be taught at each grade level (kindergarten through twelfth) and that the course be taught by a health education specialist where possible. It also called for periodic monitoring of each school district's progress in implementing the resolution.

Some of the major recommendations set forth to implement the health education resolution included:

1. That health education and physical education be taught and graded as separate subjects.
2. That a health education specialist direct the development of the curriculum.
3. That adequate classroom facilities, space, and teaching materials be provided for health education instruction.
4. That health education be taught a minimum of three periods per week at the elementary school level and scheduled in blocks of five periods per week for eight to nine weeks at the secondary grade (sixth through twelfth) level.
5. That the 18-hour requirement to teach health should be upgraded to 30 hours, and all health classes on a secondary level should be taught by a health education major.

The comprehensive approach to health education in the New Jersey schools has developed slowly because there is little consensus among educators on what, when, or how health edu-

cation should be taught, and on its effectiveness. Nevertheless, it should be noted that New Jersey is one of the only 16 states in which comprehensive health education is mandated by the State Board of Education and/or the Legislature⁴.

In order to ascertain the extent to which the Board's 1973 recommendations have been implemented and to gain a greater understanding of the potential impact of various approaches to health education in the New Jersey public schools, the Department of Preventive Medicine and Community Health of the New Jersey Medical School plans to collaborate with the State Board of Education on the following three-phased investigation:

1. Conduct a comprehensive survey of all health education programs in New Jersey public schools.
2. Conduct a survey of current health knowledge, attitudes, and practices in selected schools.
3. Design and implement scientifically controlled evaluations of the effectiveness of the most promising current approaches to school health education.

There is much to be learned about how we can utilize our health education resources in an optimal way to promote positive health practices at an early age before bad habits are established, and to achieve positive health behavior modification. This is one of the major challenges facing the health professions today. It can be approached best by a multidisciplinary effort utilizing the combined expertise of the health educator, the researcher, and the medical and dental practitioner. The medical profession has much to contribute. Hopefully it will accept the challenge.

Summary

The current status of health education in the New Jersey public schools was examined by means of observations and studies made during the past few years; this included school health education legislation, county distribution of health teacher/student ratios, surveys of health knowledge and health practices, and disease trends.

The minimal requirements for teaching health education in New Jersey public schools is

reflected in a wide disparity in the employment of health teachers (per students enrolled) in the State's 21 counties. Available surveys of school populations suggest that there are major deficiencies in the level of health knowledge, particularly in the large urban areas, and reveal increasing trends in teenage cigarette smoking and alcoholic beverage consumption. These observations, along with the large number of reported cases of venereal disease in teenagers, emphasize the need for more effective health education in the New Jersey public schools.

The role of the physician in school health curriculum development and programing is examined by means of a physician survey which indicates that only a minority of physicians are involved in school health education programs. School surveys suggest that most teenagers are unlikely to turn to their private physician for information and advice on personal health practices.

In order to ascertain the current status of health education and to gain a greater understanding of the potential impact of various approaches to health education in the New Jersey public schools, a three-phased investigative study is proposed.

References

1. New Jersey State Department of Education: *Health Education Curriculum Guidelines, K-12*. New Jersey Department of Education. Division of Curriculum and Instruction, Trenton, 1970.
2. Personal communication: New Jersey State Department of Health, Division of Venereal Disease Control.
3. Darden JS: "Once more into the breach . . ." To the defense of health education. *J School Health* 43:523-25, 1973.
4. Castile AS and Jerrick SJ: *School Health in America*, Kent, Ohio, American School Health Association, 1976.

100 Bergen Street, Newark

New Jersey Committee on Trauma American College of Surgeons

Saturday, May 14, 1977 — Haddon Hall, Atlantic City

Meeting: 11:30 a.m.

Luncheon: 12 noon

followed by

Annual Spencer T. Snedecor Trauma Oration

NEW JERSEY DOCTORS' NOTEBOOK

Trustees' Minutes

December 19, 1976

A regular meeting of the Board of Trustees was held on Sunday, December 19, 1976, at the Executive Offices, Trenton. Detailed minutes are on file with the secretary of your county medical society. A summary of significant actions follows:

Determination of Health Care Facility—Proposed Regulation . . . Approved the following recommendation relating to the Department of Health proposed regulation concerning certificate of need in determination of health care facilities:

That a statement be presented to the Department of Health re-emphasizing the position of The Medical Society of New Jersey that the physician in private practice is excepted from the scope of the certificate of need legislation. Additionally, it should be stated that if the Department attempts to produce a contrary result, this Society is committed to litigate this issue.

Proposed Rule

Subchapter 6. Health Care Facilities

8:31-6.1 Determination of a health facility

(a) The Commissioner of Health, consistent with "the public policy of the State that hospital and related health care services of the highest quality, of demonstrated need, efficiently provided and properly utilized at a reasonable cost are of vital concern to the public health" (N.J.S.A. 26:2H-1) and in accordance with the definitions of a health care facility and a health care service, as specified in N.J.S.A. 26:2H-2a, b, shall determine whether a proposed or existing system or modality of health care delivery constitutes the operation of a health facility. If so designated, such facility shall be subject to all of the provisions of the Health Care Facilities Planning Act (N.J.S.A. 26:2H-1 et seq.) and those appropriate rules and regulations promulgated thereto.

MSNJ Response to Department of Health

Re: Proposed Rule concerning the Determination of Health Care Facility 8 N.J.R. 549(b)

Date: December 21, 1976

The Medical Society of New Jersey offers the following comments in opposition to the above-mentioned proposal.

(a) The proposal in question runs counter to, and at variance with, the patent language and intent of N.J.S.A. 26:2H-1, 26:2H-2a, 26:2H-2b, 26:2H-18 through 26:2H-28.

(b) The Department is without authority either covertly or overtly to define the term "health care facility" in a manner at variance with the clear legislative meaning and intent of N.J.S.A. 26:2H-1 et seq.

(c) An administrative agency may not, by virtue of rule-making ability, amend or alter existing statutory language.

(d) The Legislature did not grant the Department of Health the authority to alter or expand the definitions or jurisdiction of certificate of need legislation.

(e) N.J.S.A. 26:2H-5 which delineates the powers of the Commissioner, does not authorize the adoption or implementation of the proposal under consideration.

The matter currently pending is not a new issue. It has been before both the Health Care Administration Board and the Commissioner for well over two years. The recent minutes of the Health Care Administration Board plainly indicate that what we have before us is simply a continuation of this ongoing effort to embrace the private practice of medicine within the labyrinth of certificate of need obfuscation.

The last rule proposal resulted in a public hearing which generated much debate, extensive polemics, exhaustive press coverage, but no good faith effort on the part of the Department to follow due process and other legal parameters.

The report of the Hearing Officer at the September 11, 1974 session, called for the following:

(1) An opinion from the Attorney General as to the legality and constitutionality of the proposal.

(2) Documented proof that the regulation would further the intent of the Planning Act should be gathered and submitted to all parties.

As you are well aware, the opinion of the Attorney General has not been released and the documented proof has not been forthcoming. We have no alternative but to assume that the opinion of the Attorney General has not been released because it is adverse to the goals and aims of the Department and that the documented proof simply does not exist.

We believe in the certificate of need legislation when reasonably administered. We do not, and will not, succumb, to a blatant effort by the Department to alter the scope of the legislation via administrative fiat. Services rendered by physicians in their private practices are excepted from the scope of the Act.

Perinatal Services—Proposed Regulation . . .
Approved the following recommendation con-

cerning a Department of Health proposed regulation to establish minimum standards and general criteria to be applied to the planning and review of Certificate of Need applications for perinatal services: (If adopted, rules will be cited as N.J.A.C. 8:31-8.1 et seq.)

That MSNJ present to the State Department of Health a statement of opposition to the proposed Perinatal Services Regulations as currently constituted (8 N.J.R. 550b).

Debarment, Suspension, and Disqualification of Providers in Medicaid Program (8 N.J.R. 552)—Proposed Revisions . . . Approved the following recommendations which relate to the proposed revisions concerning debarment, suspension, and disqualification of providers in the Medicaid program: (MSNJ has been meeting regularly with the Medicaid staff and the State has never discussed the material now being proposed.)

(1) That the Board of Trustees advise the Division of Medical Assistance that the rules in question should be submitted to discussion between the Division staff and the Committee on Medicaid before they are finally acted upon.

(2) That the Board of Trustees protest the inadequate response time allowed on a rule proposal of this magnitude.

(3) That the Board of Trustees object to the failure of the Division of Medical Assistance to bring this matter before the Committee on Medicaid prior to the December 9 publication.

. . . Directed that a copy of the proposed regulations and MSNJ's response be sent to the New Jersey Foundation for Health Care Evaluation and the eight New Jersey PSROs.

CAT Scanners—Proposed Standards . . . Directed that a letter of protest be sent to the Department of Health concerning the proposed regulations to establish minimum standards and general criteria (which are unsatisfactory to the Radiological Society of New Jersey) to be applied to the planning and review of Certificate of Need applications for CAT units. (If adopted, rules will be cited as N.J.A.C. 8:31-9.1 et seq.)

. . . Directed that the Council on Medical Services meet with the Radiological Society and other interested parties to establish long-term proposals concerning CAT scanners.

AMA Clinical Conference . . . Received reports from Drs. Madara and Donnelly on the AMA Clinical Convention in Philadelphia, December 4-8, 1976 and took the following actions:

(1) Voted officially to commend John E. Kustrup, M.D., at the completion of this term, his last, as AMA Delegate and as an Alternate Delegate.

(2) Referred to the Executive Committee, in consultation with the AMA Delegation, the immediate problem of adjusting the number of Delegates and Alternate Delegates who will serve during the forthcoming AMA Annual Meeting.

(3) Requested the Standing Committee on Revision of Constitution and Bylaws to develop a mechanism for adjusting the number of Delegates and Alternate Delegates to conform with the number of seats authorized by the AMA.

Physicians' Biennial Registration . . . Received a letter from the Executive Secretary of the State Board of Medical Examiners advising MSNJ that a proposal from the Union County Medical Society for a print-out of all physicians who could not be registered because of improper address (to be used by county societies for follow-up) could not be accomplished for this current registration period, but that the appropriate print-out would be available in September 1977 following the next registration period.

Joint Meeting—Executive Committees MSNJ and NJHA . . . Noted the following items from the joint meeting of the Executive Committee of MSNJ and NJHA:

(1) A HRET *Ambulatory Care Survey* form will be sent to each hospital for completion.

(2) Arrangements are being worked out whereby *unlicensed physicians* can be covered for *professional liability insurance* through their hospitals.

(3) MSNJ and NJHA are watching closely a suit (Atlantic City Medical Center) concerning the *right of a medical staff to curtail the clinical privileges* of an attending physician.

(4) Voted to approve the *procedural guidelines for health facilities dealing with comatose patients*. (JMSNJ 74:66, January 1977)

(5) Noted that *chiropractors have filed suit against the AMA* for violation of antitrust laws.

(6) Noted that there will be a meeting during the month of February with the State Board of Medical Examiners concerning *temporary licenses*.

Rutgers HMO Certificate of Need . . . Directed that the controversy involving the Middlesex County Medical Society concerning the expansion of the Rutgers Community Health Plan in what some believe is an already physician-saturated area be referred to the Executive Committee, in cooperation with representatives from the area involved, for a decision as to the best approach to the situation.

State Health Coordinating Council . . . Directed that a communication be sent to the Governor indicating that MSNJ has nominated Nicholas E. Marchione, M.D., for membership on the State Health Coordinating Council.

Medical Economics Article . . . Directed the Executive Director to investigate and respond to an article in the December 13, 1976 issue of *Medical Economics* which may have, by innuendo, indicated that a specified number of M.D.s were indicted for fraud.

Resolutions #4 (Assignment of Benefits) and #24 (Blue Shield Claim Form) . . . Received and referred to the Council on Medical Services the following response from Medical-Surgical Plan of New Jersey concerning the above-mentioned 1976 House of Delegates Resolutions:

Regarding Resolution #24

Resolution #24 calls on Blue Shield of New Jersey to accept a Health Insurance Council (HIC) form in lieu of its own claim forms.

To process its claims in a manner equitable to physicians and Blue Shield subscribers alike, the Plan needs certain information. The HIC form currently provides no space for several necessary items and permits no alteration of the form whatsoever. The following considerations cannot be ignored:

1. As a result of New Jersey's no fault law, Blue Shield complied with the Commissioner of Insurance's request and does not pay for any automobile accident-related injuries. Therefore, we must ask whether or not an injury is related to an automobile accident.
2. In accordance with New Jersey's laboratory disclosure law, a patient or third-party payor is entitled to know the name of the laboratory where the services were performed and the actual, itemized charges paid or payable to the laboratory.
3. Administration of Blue Shield of New Jersey's contracts require:

- a. A statement as to whether all prenatal care was provided by the same physician.
- b. The names of any other physicians rendering care during hospitalization.
- c. A statement that services were personally performed.

In addition, certain objections to the Blue Shield claim form expressed in Resolution #24 are simply not valid. Overall, the Blue Shield of New Jersey Service Report requires less information than the HIC form, which requires certain items not asked for on the Blue Shield form.

1. Date of first examination
2. Preexistence of symptoms
3. Disability information (5 dates)

The intent of Resolution #24 to cut down the increasing flow of insurance paper work to physicians is understandable and reasonable. However, the use of the HIC form will not accomplish this intent and may indeed increase the paper work because the Plan would have to contact the physician for additional information.

Regarding Resolution #4

Resolution #4 petitions Blue Shield of New Jersey to change its contract to allow assignment of benefits to non-participating physicians. Our committee reviewed background information which indicates that the principle of direct payment to Participating Physicians and direct payment to subscribers for services rendered by non-participating physicians has repeatedly been supported by the House of Delegates of The Medical Society of New Jersey, both before and after the 1964 date mentioned in the resolution.

The Medical Society's Board of Trustees is similarly on record.

Blue Shield's Board noted that Participating Physicians have agreed to accept Plan payment as payment-in-full for eligible services rendered to subscribers whose incomes are below specified levels, and quoting from the attached statement by MSNJ's legal counsel . . . "participating physicians, in effect, make a sacrifice for the benefit of all subscribers which is not made by non-participating physicians . . . therefore, it would be improper for the non-participating physician to receive all the benefits received by the participating physician . . .".

If non-participating physicians were paid directly, there would be no practical reason to participate, and eligible subscribers would be deprived of service benefits—that feature of Blue Shield which sets it apart from commercial insurance carriers. Direct payment is readily available to all who agree to participate.

In the last three years the Plan has been able to promote the 750 and UCR contracts instead of the old 500 contract and the majority of our contracts are now in the 750 and UCR category. Groups are willing to pay the additional premium for the 750 and UCR contracts which pay higher fees to the physicians only if we can assure them service benefits from a large group of Participating Physicians. They would not buy these contracts if we accepted assign-

ments and weakened the service benefit part of our program.

After careful study, and for the above reasons, the Blue Shield Board regrets that it cannot implement the suggestions contained in Resolutions #24 and #4.

Scientific Advisory Committee of the Cancer Institute of New Jersey . . . Received a request from the President of CMDNJ for MSNJ to name a representative to serve on the Scientific Advisory Committee of the Cancer Institute of New Jersey, and noted that Roy T. Forsberg, M.D., has been requested to serve in that post.

Report from the Foundation

Daniel J. O'Regan, M.D., Medical Director

Funding for any or all of our three unfunded PSRO areas—Bergen, Hudson, and Union, can be expected before this year has run its course.

The Foundation/Support Center will host the Mid-Atlantic PSRO Conference this month at Cherry Hill.

PSRO Manuals for the Review Coordinator and Physician Advisor have been developed by NJFHCE, and are available at nominal cost.

The demise of the "Swine Flu" immunization project should remind us that human behavior and biology do not always follow predictable patterns. It is hoped that the planning experts and consultants will bear this in mind as they map out the future of "health" care and its delivery. An assumption was made in this space, last month, which proved to be defective. It concerned the poll in the Central New Jersey PSRO area. The poll concluded on December 1, with counting of the ballots eight days later. The poll asked the doctors in the area to signify whether they did or did not feel that the Central New Jersey PSRO was truly representing their interests. The response was in the negative. As a result, the Secretary of

HEW will not be able to designate a Conditional PSRO for the area from Ocean to Hunterdon counties. This does *not* mean that there will not be some form of PSRO in the area, but it does mean that those who worked long and hard to establish a physician-operated PSRO must leave. What steps will be taken to establish an "alternate" PSRO in the area are not defined as of this writing, and no predictions will be made here. This Foundation will continue its efforts to see that whatever replacement is established will be organized by and for physicians.

A year ago, we were directing your attention to the increasing HMO activity in New Jersey. The Foundation, through its IPA (Individual Physicians Association) Committee, had begun its activities investigating this concept. Of all the prepaid concepts, the IPA is closest to the traditional form of practice. It allows freedom of choice for patient and physician and it engages the services of the doctor working in his own office, at fee-for-service, at risk. In February of 1977 most of you must be watching the spread of the HMO pattern in our State. Patient patterns are being changed in many localities. Since the prepaid concept has moved East and, like PSRO, is unlikely to go away, it behooves all of us to pay close attention to the IPA concept. Our committee, under the leadership of Dr. Richard Lang, will have more information for you as time goes on.

Predictions on priorities of the new Health, Education, and Welfare team will have to wait until the Carter administration makes its choices. Others will be watching along with the Foundation—the Health Systems Agencies, the Medicare and Medicaid authorities, those interested in health manpower, labor unions, and those who provide health insurance for employees of large corporations. Keep yourself informed.

**1977 Annual Meeting
May 14-17**

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CMDNJ Notes

Stanley S. Bergen, Jr., M.D.
President, CMDNJ

Last month we introduced Dr. Russell L. McIntyre, CMDNJ's recently appointed director of Programs in the Health-Care Humanities, and presented some issues of biomedical ethics, a not-so-new subject that has been formalized in only half a dozen medical schools across the country. Here, Dr. McIntyre, whose work currently is being supported by a grant from the Foundation of CMDNJ, provides additional insights into the program he is conducting at the College.

The study of biomedical ethics begins with three basic affirmations: (1) that every decision in the practice of medicine involves the prioritizing of human values and the selection of one value as more appropriate over others; (2) that students in the basic sciences, medicine, dentistry, and allied health rarely have been given the opportunity systematically to explore the values, explicit and implicit, which exist in the employment of the various biomedical technologies available to them in providing patient care; and (3) that such a systematic discussion of the ethical, legal, and social issues which emerge in the provision of health care will enable the student to understand his or her responsibilities in a much more profound way.

The tradition of "codes" in medical ethics began with Hippocrates in the fifth century B.C. Since World War II, several major attempts have been made to list the responsibilities of health professionals with regard to patient care. Those codes would include the "Nuremberg Code," the "Helsinki Declaration" and, most recently, the expanded code of the World Health Organization.

The major principles identified in these codes are: (1) Do Not Harm (*primum non nocere*); (2) The Sanctity of Human Life; (3) The Alleviation of Suffering; (4) The Sanctity of the Physician-Patient Relationship; (5) The Right to Truth; and (6) The Right to Informed Consent. Two others, perhaps, are being added in our own culture: The Right "To Die with Dignity," and The Right to Health Care.

CMDNJ's new programs in the health-care

humanities will serve to facilitate an examination of these "universal principles" in light of modern biomedical technology and the impact they will have on health care in the future. Initially, three phases of the program are being developed simultaneously.

Phase One involves formal courses which are being introduced as electives in the basic-science curriculum at the CMDNJ-New Jersey Medical School, under the aegis of the Office of Primary Health Care Education, and at the CMDNJ-New Jersey Dental School, under the sponsorship of the Department of Community Dentistry. These courses will explore the ethical and legal issues in:

- (1) Professionalism and social responsibility.
- (2) Population control—contraception, abortion, sterilization.
- (3) Control over death and dying—prolongation of life or delay of death, euthanasia, care of the dying, organ transplantation, hemodialysis.
- (4) Control over human genetics—screening, counseling, engineering, gene therapy, cloning, procreative rights of genetic defectives.
- (5) Behavior control and modification—drugs, electroshock, psychosurgery, psychiatry.
- (6) Health-care delivery—the physician-patient relationship, confidentiality, truth-telling, professional competence and continuing education, the "right" to health care, who should decide medico-moral problems.
- (7) Medical experimentation and research on human subjects—*informed consent*, patients' rights, parameters for therapeutic/non-therapeutic research, appropriate use of patients for teaching purposes.

Phase Two focuses on the clinical aspects of health education and involves seminars, case conferences, "ethics" grand rounds, and consultations for students and house staff as they gradually begin to assume more and more responsibility for patient care. The seminars focus on specific problems involved in clinical decision-making, dealing with staff conflict and differing management opinions, health care teams, patient education, communicative techniques, and so on. Several grand rounds already have been presented at CMDNJ-Martland Medical Center, Newark, and currently monthly ethics' conferences are being

held at Children's Hospital, Newark. Similar programs are under development at CMDNJ-Raritan Valley Hospital, Green Brook. At CMDNJ-Rutgers Medical School, Piscataway, informal noon-time ethics' discussions are being held on the first and third Thursdays for students, faculty, and staff. Seminars have been presented also for several programs in the CMDNJ-School of Allied Health Professions and for medical and other health-profession groups in the State of New Jersey.

Phase Three encompasses the development of special public lectures in the field of biomedical ethics. In December, three such lectures were presented on CMDNJ's Newark campus, and on March 23, 1977, a half-day conference on "Control of Dying" is being planned for CMDNJ-Rutgers Medical School. Health professionals are cordially invited to attend. Several other sessions are being considered for later in the spring.

It is anticipated that exposure to a systematic analysis of these issues, and the alternatives available for solving the dilemmas, will make us more sensitive to the humanistic dimensions of advances in biomedicine.

Therapeutic Drug Information Center*

The Schwartz Inter-National Pharmaceutic and Therapeutic Drug Information Center of the Brooklyn College of Pharmacy, Long Island University, compiles the information contained in this column each month. The Center serves as a source of intelligence on therapeutic and pharmaceutic information not readily available to physicians, at no charge to them, and provides this information with minimal time involvement. It is staffed by trained pharmacists; Jack M. Rosenberg, Pharm. D., Associated Professor and Chairman, Division of Clinical Pharmacy, Brooklyn College of Pharmacy, is Director and Walter Modell, M.D., Emeritus Professor of Pharmacology at Cornell University Medical College, is pharmacologist consultant. The service is available

Monday through Friday from 9 a.m. to 4:30 p.m.—telephone (212) 622-8989 or 636-7535. The following are questions and answers handled by the Center recently.

1. What effect do phenothiazines have on human growth hormone?

The significance of phenothiazine alteration of growth hormone (GH) secretion arose from a few reports that chlorpromazine (Thorazine®) may suppress the secretion of GH and thus be therapeutically useful in the treatment of acromegaly and gigantism, both of which are associated with excessive secretion of GH^{1,2}. A medical approach to such conditions would be particularly beneficial for the treatment of elderly or medically unfit patients, for those in whom pituitary surgery or irradiation technique had failed, and in children where surgical therapy has shown a lower order of success than with their adult counterparts. In addition, suppressed secretion of GH may have implications in those patients on long-term therapy with phenothiazines who originally had normal GH secretion.

Kolodny, *et al.*³, treated a 21-year-old male acromegalic with chlorpromazine, medroxyprogesterone (Provera®) and a combination of both these drugs. Serial levels of GH in the patient fasting and during six-hour oral glucose tolerance tests were determined before any treatment, during treatment, and between treatment periods. The clinical manifestations improved during chlorpromazine. Serum GH level determinations suggested that chlorpromazine suppressed secretion of GH.

Alford, *et al.*⁴, determined the secretion rate of GH in five acromegalic patients. Determinations were made before and after four to 36 weeks of treatment with chlorpromazine 100 mg/day. There were no significant changes in GH secretion rates before and during treatment. It was concluded that chlorpromazine did not suppress GH secretion in acromegaly. This study corroborates an earlier study on healthy male volunteers in which no change in GH secretion rate or metabolism rate was detected as related to chlorpromazine therapy.⁵ Avruskin, *et al.*⁶, reported a case of a pre-adolescent girl with gigantism in whom baseline endocrine studies were performed including GH levels. An acute and chronic evaluation of chlorpromazine, 100 mg/day, failed to decrease growth hormone, suggesting that this therapy was ineffective in altering the increased secretion of GH.

In a study involving eight acromegalic patients, Dimond, *et al.*⁷, found no alteration of GH levels associated with chlorpromazine (100mg/kg) for 30 days.

Singh, *et al.*⁸, investigated the effect of L-dopa and chlorpromazine on GH release in six healthy male volunteers and six acromegalic patients. In healthy subjects the mean plasma GH level was elevated after L-dopa, and chlorpromazine had no effect on this L-dopa increased growth hormone level. In the acromegalic patients, neither L-dopa nor chlorpromazine had any effect on plasma growth hormone levels, again suggesting the ineffectiveness of chlorpromazine in suppressing GH.

*This month's column was prepared by Dexter D. Mar, Pharm. D., P. Sangkachand, B.S., M. K. Raina, M. Pharm. Ph.D., and T. M. John, B.S., Brooklyn College of Pharmacy, LIU.

In conclusion, the initial encouraging reports of chlorpromazine in the treatment of acromegaly and gigantism have not been corroborated to date.

Further advances in the area of neuroendocrinology are needed in order to determine pharmacological approaches to control GH secretions.

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5. Goodman LS and Gilman A: *The Pharmacological Basis of Therapeutics*, 4th Edition. New York, MacMillan, 1975, p. 151.
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2. Please provide information on the management of pseudomembranous colitis with cholestyramine resin.

Pseudomembranous colitis (PMC) is a form of inflammatory bowel disease of which the precise etiology is unknown. It has been associated with antibiotic therapy including ampicillin (Polycillin®; Penbritin®), tetracycline (Achromycin®; Bristacycline®), chloramphenicol (Chloromycetin®), lincomycin (Lincocin®), and clindamycin (Cleocin®). PMC may be severe, protracted and life threatening, and the treatment in general is supportive.

Recently, a few case reports were published in which cholestyramine, an anion exchange resin which is not absorbed from the gut, appeared to be of value in the management of PMC.

Burbige and Milligan¹ reported two cases of pseudomembranous colitis associated with lincomycin and clindamycin given prophylactically after surgery. In both cases, diarrhea was not relieved by diphenoxylate and atropine (Lomotil®). The patients were given cholestyramine resin, four gm orally three times a day. The frequency of stools decreased in two days. Stools became firm in about four days. Both recovered from their respective ailments with no further episodes or symptoms of PMC.

Sinatra, et al.², reported successful use of cholestyramine in a six-month-old infant refractive to conventional treatment. Diagnosis of pseudomembranous colitis was established histologically, and the patient was given fluid and electrolytes to replace significant stool losses. After fourteen days of hospitalization and usual supportive therapy, which did not relieve the symptoms, the infant was then placed on 500 mg cholestyramine orally every six hours. Reduction in frequency of stool was noticed within 24 hours and the infant started passing normal stool within 72 hours. Treatment with cholestyramine was discontinued after 10 days. Subsequent follow-up for the next six months showed the patient in normal health and with no incidence of diarrhea.

In conclusion, further studies are needed to determine the role of cholestyramine in the treatment of PMC.

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2. Sinatra F, et al: Cholestyramine treatment of pseudomembranous colitis. *J Pediatr* 88:304 (Feb) 1976.
3. What is the role of lithium carbonate in thyrotoxicosis?

Lithium carbonate (Eskalith®, Lithane®, Pfi-Lithium®) has been used in various psychiatric disorders. In the United States, the drug is approved for use in the treatment of manic episodes of manic depressive illnesses. In a series of clinical studies, it was observed that several patients developed goiter and true myxoedema while on lithium carbonate. These observations led to the use of lithium carbonate in the treatment of thyrotoxicosis, alone as well as an adjunct to other therapies. The mechanism of action suggested was that lithium directly inhibits the release of hormonal thyroid iodine in a similar manner to that of iodine.¹

Lazarus, et al.², treated eleven patients with a long history of Grave's disease with lithium for six months. Each of the patients received, once daily, 800-1200 mg of lithium carbonate so that serum lithium concentrations ranged from 0.5 to 1.5 mEq per liter. Eight patients were clinically euthyroid two weeks later with a reduction of 35 percent in the serum thyroxine iodine and triiodothyronine; however, radioiodine uptake did not return to normal until six to eight weeks. Seven patients relapsed one to four weeks after stopping therapy. Lithium therapy did not appear to affect the course of the disease. The authors suggested that lithium could replace iodides in the management of hyperthyroidism in some cases.

Kristensen, et al.¹, conducted a controlled study to compare the efficacy of lithium and thiocarbamides in twenty-four patients with newly diagnosed thyrotoxicosis. The patients received either methimazole (Tapazole®) 40 mg per day or lithium carbonate in doses (32.4 mEq per day) so as to maintain serum levels at 0.5 to 1.3 mEq per liter. The treatment was continued for ten days. Both treatments improved the various laboratory parameters of thyroid function equally well. However, the high incidence of side effects with lithium, primarily tremor, contributed to a worsening of the patients' general condition and lithium dosage had to be reduced in seven of eleven cases. The authors concluded that lithium cannot be considered superior to thiocarbamides for the rapid control of thyrotoxicosis.

Turner, *et al.*³, conducted a controlled trial, using lithium as an adjunct to radioiodine therapy for thyrotoxicosis. The trial was conducted on 32 patients with diffuse thyroid hyperplasia. Sixteen patients received lithium carbonate (400 mg daily) for one week before and after a standardized dose of radioiodine. A comparable group of 16 patients received only radioiodine. Comparison of percentage retention of radioiodine showed that lithium carbonate increased the retention without causing any significant side effects. The authors conclude that the "potentiating" effect of lithium may prove to be a useful adjunct to radio-iodine therapy in patients with rapid thyroidal iodine turnover and in young patients in whom total body radiation dose should be kept to minimum.

Bakker, *et al.*⁴, in a letter to the editor, reported their experiences with a group of eleven patients with thyrotoxicosis. In their study each patient received 900 to 1500 mg of lithium daily to maintain serum-lithium levels between 0.5 and 0.9 mMol per liter. In each of these patients, radioiodine uptake studies were performed before and during lithium intake. Their results confirmed that lithium carbonate caused retention of radioiodine in thyrotoxic patients.

Lithium was well tolerated although transient nausea and tremor were seen. The authors considered lithium as a valuable adjunct to radioiodine in thyrotoxicosis.

In conclusion, the role of lithium carbonate in the treatment of thyrotoxicosis as a sole agent remains inconclusive and appears to offer no advantage over thiocarbamides. However, it may be useful in the management of some cases of thyrotoxicosis.

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4. Bakker K, *et al*: Lithium and thyrotoxicosis. *Lancet* 1:1135 (May) 1976

PHYSICIANS SEEKING LOCATION IN NEW JERSEY

The following physicians have written to the Executive Office of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ANESTHESIOLOGY—Ei Shun Lin, M.D., 3905 Carpenter Avenue, Apt. 1-C, Bronx, New York 10466. China Medical College (Taichung, Taiwan) 1970. Subspecialty, general practice. Board eligible. Solo, partnership, single specialty group. Available July 1977.

Dong Hyun Kim, M.D., 122 Beal Street, Lunenburg, Massachusetts 01462. Yonsei Medical School (Korea) 1962. Board certified. Solo, partnership, single specialty group. Available.

CARDIOLOGY—Chao-Tarng Cheng, M.D., 5686 Broadview Road, #2508, Parma, Ohio 44134. Kaohsiung (Taiwan) 1969. Board certified (IM). Group, partnership, solo, or fulltime staff. Available July 1977.

Thomas S. Brodie, M.D., 503 North LaJolla Avenue, Los Angeles, California 90048. Pittsburgh 1972. Group or hospital-based. Available May 1977.

GASTROENTEROLOGY—Robert Molle, M.D., 30-60 Crescent Street, Apt. 4-B, Long Island City, New York 11102. Padova (Italy) 1962. Board eligible. Solo. Available January 1977.

Elliot H. Borak, M.D., 505 East 14th Street, New York, New York 10009. NYU 1970. Board eligible. Group. Available July 1977.

GENERAL PRACTICE—Stanley Y. Lin, M.D., Box 389, Jordan, Montana 59337. Taiwan 1966. Subspecialty, internal medicine. Board certified. Partnership, single or multispecialty group, emergency, solo. Available July 1977.

HEMATOLOGY/ONCOLOGY—Jeffrey S. Perchick, M.D., 84 Redfern Drive, Rochester, New York 14620. SUNY (Buffalo) 1972. Board certified (IM). Group or partnership. Available July 1977.

INTERNAL MEDICINE—Bernard Davidoff, M.D., 344 West 72nd Street, Apt. 3-R, New York 10023. Columbia 1973. Board certified. Group, associate, solo. Available March 1977.

Rasiklal Amin, M.D., 56 Benedict Avenue, Staten Island, New York 10314. Gujarat (India). Board certified. Group, partnership, solo. Available.

James H. Wolf, M.D., 235 Townhouse, Briarcrest Gardens, Hershey, Pennsylvania 17033. NYU 1974. Board eligible. Group or partnership. Available July 1977.

Daniel M. Weinstock, M.D., 60 Plaza Street, Brooklyn, New York 11238. Johns Hopkins 1974. Board eligible. Group or partnership. Available July 1977.

Robert P. Hoffman, M.D., Naval Hospital, Beaufort, South Carolina 29902. Albany 1970. Subspecialty, infectious diseases. Board certified. Group, partnership, hospital. Available July 1977.

Antony Cyril Ernest, M.D., 2537A Ocean Parkway, Brooklyn, New York 11235. University of Ceylon 1967. Subspecialty, cardiology. Board certified. Group partnership, solo. Available July 1977.

Ramesh Chandra Gupta, M.D., 88 Mary Street, Apt. 815, Paterson 07503. R.N.T. Medical School (India). Subspecialty, gastroenterology. Board eligible. Group, partnership, solo. Available July 1977.

Pak-Chun Chan, M.D., 1801 Mt. Pisgah Lane, Apt. 13, Silver Spring, Maryland 20903. National Taiwan University 1970. Primary care group or internal medicine (solo). Available July 1977.

Masood A. Rizvi, M.D., 115 Old Short Hills Road, West Orange 07052. K. G. Medical College (India). Subspecialty, gastroenterology. Board certified. Group, partnership, solo. Available July 1977.

Charles Ifeanyi Okonkwo, M.D., 410 Maryland Avenue, Apt. 1-A, Staten Island, New York 10305. Manchester (England) 1971. Subspecialty cardiology. Board certified. Hospital-based group, partnership, solo. Available July 1977.

James L. Stammer, M.D., 5314 La Cieniga Circle, San Antonio, Texas 78233. CMDNJ 1970. Subspecialty, gastroenterology. Board certified. Partnership, institutionally-based, single-specialty group. Available August 1977.

Carlo Cecchetti, M.D., 400 Artyle Road, Brooklyn, New York 11218. Wisconsin 1972. Subspecialty, gastroenterology. Board eligible. Multi-specialty or single-specialty group, partnership. Available July 1977.

Elihu N. Goken, M.D., 5509 Greentree Road, Bethesda, Maryland 20034. Einstein 1973. Subspecialty, endocrinology. Board eligible. Single or multi-specialty group, partnership, solo. Available July 1977.

Mavidi K. Hariprasad, M.D., Medical Service, New York VA Hospital, 23rd and 1st Avenue, New York 10010. Madras (India) 1971. Subspecialty, nephrology. Board certified. Institutionally based, single or multi-specialty group, partnership. Available July 1977.

Victor G. Galati, M.D., 662 85th Street, Brooklyn, New York 11228. NYU 1972. Subspecialty, pulmonary diseases. Board eligible. Single specialty group, institutionally based, or solo. Available July 1977.

Barry H. Lubin, M.D., 15221 NE 6th Avenue, Apt. A201, Miami, Florida 33162. Hahnemann 1974. Board eligible. Partnership, single or multi-specialty group, industrial, emergency room. Available July 1977.

Charles J. Jaffe, M.D., 6009 Anniston Road, Bethesda, Maryland 20034. Duke 1971. Subspecialties, allergy, hematology. Board certified. Research, single or multi-specialty group, institutionally based. Available July 1977.

David R. Gutknecht, M.D., 174 Townhouse, Briarcrest, Hershey, Pennsylvania 17033. Cornell 1971. Board eligible. Single or multi-specialty group, research, institutionally based. Available July 1977.

Ramesh H. Rathod, M.D., 7449 Washington Avenue, Forest Park, Illinois 60130. Bombay (India) 1969. Subspecialty, cardiovascular diseases. Board certified. Single or multi-specialty group, solo. Available July 1977.

Muhammed T. Butt, M.D., 33 Highland Street, Apt. 3-H, New Britain, Connecticut 06052. King Edward (Pakistan) 1971. Subspecialty, gastroenterology. Board certified. Single or multi-specialty group or institutionally based. Available July 1977.

Kenneth S. Lewis, 3701 Twin Lakes Court, Apt. 302, Baltimore, Maryland 21207. Jefferson 1974. Board eligible. Single or multi-specialty group, partnership, emergency room, institutionally based, research, industrial, solo. Available July 1977.

Gene H. Ginsberg, M.D., USAF Hospital Cannon AFB, Clovis, New Mexico 88101. Jefferson 1972. Board certified. Single or multi-specialty group, partnership, solo, or institutionally based. Available July 1977.

Joel R. Schulman, M.D., 319 E. 24th Street, Apt. 25-G, New York 10010. Boston 1972. Subspecialty, pulmonary diseases. Board certified. Single or multi-specialty group, partnership, institutionally based, research, or solo. Available September 1977.

Robert P. Hoffman, M.D., Naval Hospital, Burton, South Carolina 29902. Albany 1970. Subspecialty, infectious diseases. Board certified. Single or multi-specialty group, research. Available July 1977.

Ralph H. Starkey, M.D., 4656 Helensburg Drive, Chesapeake, Virginia 23321. Temple, 1970. Board certified. Single or multi-specialty group, institutionally-based, research. Available July 1977.

Paul Hess, M.D., 585 Richardson Road, Rochester, New York 14623. Cornell 1972. Subspecialty, cardiology. Board certified. Hospital-based, group, partnership. Available July 1977.

Surinder S. Thind, M.D., 3901 Conshohocken Avenue, Apt. 190, Philadelphia, Pennsylvania 19131. Ludhiana (India) 1968. Subspecialty, cardiology. Board eligible. Group or solo. Available July 1977.

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OBSTETRICS AND GYNECOLOGY—Chaw P. Sun, M.D., 71 Ford Place, Bridgeport, Connecticut 06610. Taiwan 1970. Board eligible. Solo or partnership. Available July 1977.

Meena Aggarwal, M.D., 621 Stuyvesant, 401 Cooper Landing Road, Cherry Hill 08002. King George,

Lucknow (India) 1968. Board eligible. Group, partnership, hospital. Available July 1977.

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PATHOLOGY—Emil B. Georgi, M.D., 5556 Broadview Road, Apt. 3621, Parma, Ohio 44134. Ain-shams University (Egypt) Board eligible. Group, partnership, solo. Available July 1977.

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Amando Valencia Esguerra, M.D., 914 Lafayette Towers West, Detroit, Michigan 48207. Santo Tomas (Manila) 1965. Subspecialty, clinical pathology. Board certified. Partnership, solo, or single-specialty group. Available.

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Nazir Ahmad, M.D., 43-44 Kissena Boulevard, Apt. 8-M, Flushing, New York 11355. Kashmir (India) 1968. Group, partnership, solo. Available.

Dion Ferandes, M.D., 3205 Cleary Avenue, No. 2, Metairie, Louisiana 70002. Poona (India) 1969. Subspecialty, allergy. Board certified. Available July 1977.

Do Sung Hwang, M.D., 1925 N. Senate Avenue, #26, Indianapolis, Indiana 46202. Pusan (Korea) 1964. Board eligible. Group, partnership, solo, or hospital. Available July 1977.

Robert A. Shanik, M.D., 8 Wooley Lane, Apt. B-24, Great Neck, New York 11023. Virginia 1974. Group or partnership. Available July 1977.

John Ertl, M.D., 4827 J Parkway, Sacramento, California 95823. SUNY (Downstate) 1970. Board eligible. Group or partnership. Available August 1977.

Joung Wha Lee, M.D., 1694 Walker Avenue, Union 07083. Seoul (Korea) 1967. Subspecialty, general practice. Partnership, solo, emergency room, public health. Available July 1977.

Edathil Karuna Karan, M.D., 1609 Gateway, Albert Lea, Minnesota 56007. Madras (India) 1959. Board certified. Single or multi-specialty group, research. Available.

Karunyan Arul, M.D., 766 Shepard Avenue, Hamden, Connecticut 06514. University of Ceylon (Sri Lanka) 1966. Board certified. Research, group, partnership, academic, public health, emergency room. Available October 1977.

Narayan Pundarik Nayak, M.D., 436 South Landsdowne Avenue, Apt. F-101, Yeadon, Pennsylvania 19050. Subspecialty, hematology. Board certified. Group, institutional, partnership, solo, industrial, emergency room, public health, research. Available.

David M. Namerow, M.D., 638 Hallmark Drive, Glen Burnie, Maryland 21061. Louisville (Kentucky) 1972. Board eligible. Single or multi-specialty group, institutionally based. Available July 1977.

Ronald S. Bashian, M.D., 2521 South Meridian Drive, Great Lakes, Illinois 60088. SUNY (Downstate) 1972. Board eligible. Pediatric or multi-specialty group. Available July 1977.

Mark B. Levin, M.D., 5100 Highbridge St., Apt. 50-E,

Fayetteville, New York 13066. SUNY (Syracuse) 1974. Group, partnership, solo. Available July 1977.

PHYSICAL MEDICINE AND REHABILITATION—

Marius Focseneanu, M.D., 66-36 Yellowstone Boulevard, Apt. 15-G, Forest Hills, New York 11375. Bucharest 1959. Board eligible. Institutional, group.

Jau-Shiung Huang, M.D., 37-16 83rd Street, Apt. 2-G, Jackson Heights, New York 11372. Koahsiung (Taiwan) 1967. Board eligible. School health or institutionally based. Available.

PSYCHIATRY—Herbert Schein, M.D., 20 Hospital Drive, Toms River 08753. Leiden (Holland) 1968. Board eligible. Clinic, group, partnership, association, or solo. Available.

Paul King, M.D., 445 East 68th Street, New York 10021. Cornell 1974. Board eligible. Partnership, single or multi-specialty group, institutionally based, school health, administrative. Available July 1977.

RADIOLOGY—Romeo C. Ouano, M.D., 3811 Albemarle Avenue, Drexel Hill, Pennsylvania 19026. Santo Tomas (Philippines) 1961. Special interest—diagnostic radiology and nuclear medicine. Board eligible. Group or hospital-based. Available July 1977.

Richard B. Circeo, M.D., 369 Coral Sea Circle, Fort Lee, Virginia 23801. Tufts 1961. Special interest—diagnostic radiology. Board certified. Solo or Group. Available August 1977.

SURGERY—Kenneth R. Pozner, M.D., 265-24 74th Avenue, Floral Park, New York 11004. NYU 1970. Partnership or group. Available July 1977.

Kenneth N. Holwitt, M.D., 3350 Tisdale Drive, Lexington, Kentucky 40504. West Virginia 1968. Subspecialty, cardio-thoracic surgery. Board eligible. Group. Available July 1977.

Darayes S. Mobed, M.D., 80 Guion Place, Apt. 11-N, New Rochelle, New York 10801. Dow, Karachi (Pakistan) 1971. Subspecialty, peripheral vascular surgery. Board eligible. Partnership, group. Available July 1977.

Norman L. Maron, M.D., Quarters 1216, MCB, Quantico, Virginia 22134. NYU 1970. Subspecialty, orthopedic surgery. Board eligible. Partnership or group. Available July 1977.

Richard Sacks, M.D., 43B Cambridge Terrace, Hackensack 07601. Meharry 1972. Board eligible. Solo, group, association. Available July 1977.

Walid Ibrahim Sidani, M.D., 10016 Squire Meadows, #8, St. Louis, Missouri 63123. French Faculty of Medicine, Beirut (Lebanon) 1972. Subspecialty, urological surgery. Partnership, solo, single or multispecialty group, research. Available July 1977.

Julian A. Gordon, M.D., 606 East Colonial Apts., Cherry Hill, 08002. Maryland 1970. Subspecialty, urological surgery. Board eligible (US). Partnership, solo, single or multi-specialty group, institutionally based, public health, research, administrative. Available

able August 1977.

Guillermo C. Elkouss, M.D., 1103 East Cherry Hill Apts., Cherry Hill 08002. Buenos Aires 1971. Subspecialty, urological surgery. Board eligible (US). Partnership, single or multi-specialty group, research, solo. Available July 1977.

Syed Sikandar Madad, M.D., 260-18 73rd Avenue, Glen Oaks, New York 11004. Punjab (Pakistan) 1967. Subspecialty, urological surgery. Board eligible (US). Group, partnership, solo. Available July 1977.

Joseph C. Andolino, M.D., 71A Southbrook Drive, Eatontown 07724. CMDNJ 1973. Subspecialty, orthopedic surgery. Group, partnership, solo, research, emergency room, industrial, public health, academic. Available July 1977.

Kyung I. Kim, M.D., 2103 C Prior Road, Wilmington, Delaware 19809. Seoul (Korea) 1968. Subspecialty, orthopedic surgery. Group partnership, solo. Available July 1977.

Ashok Kumar Sinha, M.D., State General Hospital, Durgapur-6, West Bengal, India. Darbhanga (India) 1963. Group, partnership, solo, research, academic, institutionally based. Available.

Subhahs R. Puranik, M.D., 1835 Franklin Street, Denver, Colorado 80218. Poona (India). Subspecialty pediatric surgery. Group, partnership, or solo. Available July 1977.

Charles P. Clericuzio, M.D., 54 Victoria Place, Red Bank 07701. Wisconsin 1971. Subspecialty, vascular surgery. Group, partnership, or hospital-based academic/teaching position. Available July 1977.

UROLOGY—Stuart Zykorie, M.D., 152 Baltic Street, Brooklyn, New York 11201. NYU (Downstate) 1972. Board eligible. Partnership or group. Available July 1977.

Stephen C. Rochman, M.D., 529 Martin Avenue, Morgantown, West Virginia 26505. Meharry 1970. Board eligible. Partnership or group. Available July 1977.

Alexander M. Panossian, M.D., 21 River Street, Apt. 386, Little Ferry 07643. Beirut (Lebanon) 1964. Board eligible. Any situation considered. Available.

Jeffrey Kossow, M.D., 414 Fireside Lane, Cherry Hill 08003. Georgetown 1969. Board eligible. Group, partnership, or association. Available July 1977.

Mohammad Taghi Tavassoli, M.D., 30 Pryer Lane, Larchmont, New York 10538. Tehran (Iran) 1967. Board eligible. Group, partnership, solo, or institutional. Available July 1977.

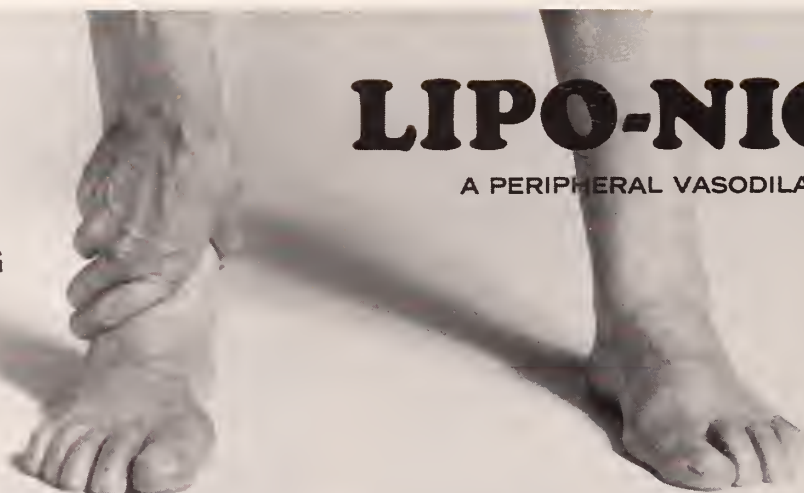
Steven Katz, M.D., 2500 Johnson Avenue, Riverdale, New York 10463. SUNY (Buffalo) 1969. Board eligible. Group, partnership. Available.

Edward Salmon, M.D., 10800 N. Military Trail, Bldg. 4030, Apt. 512, Palm Beach Gardens, Florida 33410. Kentucky 1969. Group, partnership, solo. Available.

**COLD FEET
LEG CRAMPS
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A PERIPHERAL VASODILATOR



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nicotinic acid therapy

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Each blue tablet contains:

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Thiamine HCL (B-1) ... 25 mg.
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DOSE: 1 to 5 tablets daily.

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DOSE: 1 to 3 tablets daily.

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Each time-release capsule contains:

Nicotinic Acid 300 mg.
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Thiamine HCL (H-1) ... 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) ... 10 mg.

In a special base of prolonged therapeutic effect.

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Indications: For use as a vasodilator in the symptoms of cold feet, leg cramps, dizziness, memory loss or tinnitus when associated with impaired peripheral circulation. Also provides concomitant administration of the listed vitamins. The warm tingling flush which may follow each dose of LIPO-NICIN 100 mg. or 250 mg. is one of the therapeutic effects that often produce psychological benefits to the patient. Side Effects: Transient flushing and feeling of warmth seldom require discontinuation of the drug. Transient headache, itching and tingling, skin rash, allergies and gastric disturbance may occur. Contraindications: Patient with known idiosyncrasy to nicotinic acid or other components of the drug. Use with caution in pregnant patients and patients with glaucoma, severe diabetes, impaired liver function, peptic ulcers and arterial bleeding.

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LETTER TO THE JOURNAL

Counter Suit?

December 5, 1976

Dear Sir:

In a recent letter to the editor, Dr. Harry Arons urged that doctors of the Society contribute to a fund which would finance countersuits. He reasoned that this would be a way to combat the ease with which a plaintiff may file suit at no cost to himself.

This approach certainly has its appeal. However, many physicians have come to realize that a solution requires meaningful legislative re-

form. I wish to publicize a recently-enacted Massachusetts law which has been effective in preventing nuisance suits. Such an approach is more practical than the use of counter suit.

As described in *American Medical News*, October 25, 1976, under the new law a three-member panel is used to screen malpractice suits. The panel's decision is not binding, but a plaintiff who wishes to go to trial despite the panel's negative findings must post a \$2,000 bond, which can be raised by the judge. If the plaintiff goes to trial and loses, the bond is payable to the defendant. Constitutionality is not thought to be a problem regarding access to the courts, as the bond can be lowered if the plaintiff is indigent. Results, thus far, are impressive.

I believe that we, in New Jersey, need such a law.

(Signed) John H. Lifland M.D.

ANNOUNCEMENTS

Course in Pediatric Clinical and Theoretical Allergy

In cooperation with the New Jersey Medical School, CMDNJ, the Children's Hospital of Newark is sponsoring a review course in clinical problems in pediatric allergy designed for pediatricians, family physicians, and allergists. The program runs from September through May. Lectures are held each Thursday from 11 a.m. to 12 noon in the Chapel Conference Room at United Hospitals of Newark. In addition a pediatric allergy clinic will be held from 8:30 to 10 a.m. on each of these days, and from 12 noon to 1 p.m. there will be a pediatric conference. Hour-for-hour credit will be awarded in Category I of the AMA Physician's Recognition Award. Tuition is \$100. For information, please address a communication to Arthur F. Fost, M.D., Director of Allergy, Children's Hospital of Newark, 15 South 9th Street, Newark 07107.

The schedule for January and February is as follows:

Feb. 17—Molds and Pollens
Feb. 24—Pediatric Pulmonary Conference
Mar. 3—Diagnosis of Rhinitis
Mar. 10—Allergic Rhinitis, Vasomotor Rhinitis, Serous
Otitis Media
Mar. 17—Drug Therapy of Upper Respiratory Allergy
Mar. 24—Pediatric Pulmonary Conference
Apr. 7—Report on Allergy Congress

Conference on Maltreatment of Children

On March 25 an all-day conference on the social costs of the maltreatment of children will be held in the auditorium of the Woodrow Wilson School, Princeton University. Sponsor of the program is the Protective Services Resource Institute of Rutgers Medical School, CMDNJ. Purpose of the conference (which will be conducted in the form of panels) is to provide an-

swers to the cost to society of the maltreatment of children as observed in the fields of social policy, mental health, pediatrics, human development, law enforcement, rehabilitation of criminal offenders, and service delivery to children. Further consideration will be given to calling to the attention of public and private decision-makers the social consequences of the maltreatment of children and the need for decisions to lessen these effects. For further information please write to the Protective Services Resource Institute, Rutgers Medical School, P.O. Box 101, Piscataway 08854.

Seminars in Emergency Medical Care

The Inter-Agency Commission on Emergency Medical Care, in cooperation with The Medical Society of New Jersey, will conduct seminars for physicians in emergency medical care at the following hospitals on the dates noted:

St. Joseph's Medical Center, Paterson

April 6
April 13
April 20

Cooper Medical Center, Camden

April 6
April 13
April 20

Middlesex General Hospital, New Brunswick

April 28
May 5
May 12

Monmouth Medical Center, Long Branch

May 25
June 1
June 8

St. Elizabeth Hospital, Elizabeth

June 1
June 8
June 15

The subjects are the same at each hospital: cardio-respiratory emergencies (1st day), trauma in all specialties (2nd day), and pediatric, otolaryngology, ophthalmology, and dermatology emergencies (3rd day). Application has been made for Category I accreditation. A complete program and registration form will be sent to all physicians. For additional information, please communicate with Jack R. Karel, M.D., Chairman, Inter-Agency Commission on Emer-

gency Medical Care, 115 North Avenue, Hillside 07205.

Cardiology Courses in Mexico

From April 16 through April 21 on Cozumel Island, Mexico, Temple University School of Medicine will sponsor a program in Practical Clinical Cardiology. Topics to be discussed in an informal workshop style are congestive heart failure, coronary artery disease, and office management of cardiac problems. Registration fee is \$150. Please make your check payable to Temple Postgraduate. Accreditation will be given for 18 hours in Category I of the AMA Physician's Recognition Award. A travel "package" is offered which will include round-trip air fare, five nights' lodging, breakfasts and dinners. An optional sightseeing excursion to the Yucatan also is available. For information and registration please communicate with Albert J. Finestone, M.D., Assistant Dean, Continuing Medical Education, Temple University School of Medicine, 3400 North Broad Street, Philadelphia 19140.

Aspen Mushroom Conference

The Fourth Annual Aspen Mushroom Conference, designed for physicians, mycologists, and other scientists, will be held from August 7 to 12. Sponsored by the Colorado Mountain College and Beth Israel Hospital in Denver, the program includes among its topics a study of mushroom chemistry and chromatography, and courses on the diagnosis and treatment of mushroom poisoning and on hallucinogenic mushrooms. Adequate time will be allowed for leisure activities including the renowned Aspen Music Festival. AMA Category II credit will be given for up to 30 hours. For further information please communicate with the Aspen Mushroom Conference, c/o Beth Israel Hospital, 1601 Lowell Boulevard, Denver, Colorado.

1977 Annual Meeting
May 14-17

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I N G I S

A S P R E C I O U S

A S S I G H T H A V E

Y O U H A D Y O U R H E A R I N G

T E S T E D L A T E L Y A S I M P L Y

C O M F O R T A B L E H E A R I N G

I N V E S T M E N T O F A F E W M I N U T E S

Hearing losses are among the most consistently neglected health problems. Many people with them won't even admit it to themselves, let alone others. A little encouragement may start them thinking about themselves more realistically.

That's why we're offering you the poster shown here. You can hang it on the wall or stand it on a small table. It comes with booklets called "As precious as sight" that give your patients some basic facts about auditory testing and hearing losses and how easy they are to correct in many cases.

Write to us for your free poster and booklets. They just might help you to help some patients who aren't hearing as well as they used to. Even those who ordinarily wouldn't hear of it.

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WHEN A HEARING
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consider the effect on coexisting diabetes when you prescribe a vasodilator*



(POSTERIOR VIEW OF PANCREAS)

no interference in the management of the diabetic patient has been reported with

VASODILAN® (ISOXSUPRINE HCl) the compatible vasodilator

TABLETS, 20 mg.

*Indications: Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective.

1. For the relief of symptoms associated with cerebral vascular insufficiency
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangitis obliterans (Buerger's Disease) and Raynaud's disease.

Final classification of the less-than-effective indications requires further investigation.

Composition: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.
Vasodilan injection, isoxsuprine HCl, 5 mg. per ml.

Dosage and Administration: Oral: 10 to 20 mg., three or four times daily.

Intramuscular: 5 to 10 mg. (1 or 2 ml.) two or three times daily. Intramuscular administration may be used initially in severe or acute conditions.

Contraindications and Cautions: There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Parenteral administration is not recommended in the presence of hypotension or tachycardia.

Intravenous administration should not be given because of increased likelihood of side effects.

Adverse Reactions: On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.

Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted.

Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses. For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed.

Supplied: Tablets, 10 mg., bottles of 100, 1000, 5000 and Unit Dose; Tablets, 20 mg., bottles of 100, 500, 1000, 5000 and Unit Dose; Injection, 10 mg. per 2 ml. ampul, box of six 2 ml. ampuls.

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Professional Liability Insurance

The Medical Inter-Insurance Exchange of New Jersey is alive and well. As of this date over 4,500 New Jersey physicians have submitted surplus subscriptions. Policies have been issued effective February 1, 1977.

If you desire insurance or have further questions, please call the Exchange.

(609) 896-2404

MEETINGS OF MEDICAL INTEREST

This listing is compiled through the cooperation of the Committee on Medical Education of The Medical Society of New Jersey, the Academy of Medicine of New Jersey, the New Jersey Chapter of the American Academy of Family Physicians, and the Office of Continuing Medical Education of the College of Medicine and Dentistry of New Jersey. For information on accreditation, please contact the sponsoring organization(s), indicated by italics—last line of each item.

Feb.

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| <p>Daily Family Practice Conferences
12 noon—Hunterdon Medical Center, Flemington
(Sponsored by the Hunterdon Medical Center and AAFP)</p> <p>11 Pancreatitis
9-10 a.m.—St. Francis Hospital, Trenton
(Sponsored by Hahnemann Medical College and AAFP)</p> <p>11 The Phobic Balance
8:30-10:30 p.m.—Hackensack Hospital
(Sponsored by N.J. Psychoanalytic Society and AMNJ)</p> <p>11 Cardiology Conferences
18 7:30-8:30 a.m.—St. Elizabeth Hospital, Elizabeth
25 (Sponsored by St. Elizabeth Hospital and AAFP)</p> <p>12 Advances in Orthopedic Surgery
19 8:30-10:30 a.m.—New Jersey Medical School, Newark
25 10 a.m.-12 noon—(Third Saturday Only)
(Sponsored by CMDNJ and AMNJ)</p> <p>12 Family Systems Theory and Therapy
19 10 a.m.-12 noon—Seton Hall University, S. Orange
26 (Sponsored by AMNJ and New Jersey Center for Family Studies)</p> <p>14 Soft Tissue Handling and the Emergency Room
17 Acute Burn Care
24 Maxillo-Facial Trauma and Surgery
28 Radio-Therapy
5-6 p.m.—St. Francis Hospital, Trenton
(Sponsored by St. Francis Hospital)</p> <p>7 Basic Science for Surgeons
14 3-4 p.m.—Martland Hospital, Newark
21 (Sponsored by Dept. of Surgery, N.J. Medical School and AMNJ)
28</p> <p>14 Family Structure and Therapy
9-10:30 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)</p> <p>15 Gallstones
8:30-9:30 p.m.—Irvington General Hospital
(Sponsored by AMNJ and Irvington General Hospital)</p> <p>15 Thyroid Disease
12 noon—St. Mary's Hospital, Orange
(Sponsored by AMNJ and AAFP)</p> <p>15 Anesthetic Air Pollution in the Operatory
8:30 p.m. (preceded by dinner at 6 p.m.)—Fireside Inn, Rochelle Park
(Sponsored by Dental Section, AMNJ)</p> | <p>16 Grand Rounds—Shock and Critical Support
4 p.m.—St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)</p> <p>16 Care and Treatment of Rheumatic Diseases
23 12:30 p.m.—Burlington County Memorial Hospital, Mount Holly
(Sponsored by Burlington County Memorial Hospital and AAFP)</p> <p>16 Cardiology Conference
4-6 p.m.—Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)</p> <p>16 Anatomy for Surgeons
23 4-9 p.m.—Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)</p> <p>16 Allergy and Immunology
23 7:30-8:30 a.m.—Alexian Brothers Hospital, Elizabeth
(Sponsored by Alexian Brothers Hospital and AAFP)</p> <p>16 Biology and Gender Role
1-2:30 p.m.—New Jersey Medical School, Newark
(Sponsored by CMDNJ and AMNJ)</p> <p>16 Treatment of Common Dermatoses
10:30-12 noon—Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)</p> <p>16 Nutrition
1 p.m.—Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)</p> <p>16 Thanatology
3 p.m.—Fair Oaks Hospital, Summit
(Sponsored by AMNJ and AAFP)</p> <p>16 The Violent Patient
1 p.m.—Trenton Psychiatric Hospital
(Sponsored by AMNJ and AAFP)</p> <p>16 Congestive Heart Failure
9-11 a.m.—Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)</p> <p>16 Clinical Physiology of the Control of Breathing
11:30 a.m.-12:30 p.m.—V.A. Hospital, East Orange
(Sponsored by East Orange V.A. Hospital)</p> <p>16 Psychosomatic Problems in Children
9-11 a.m.—Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)</p> |
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- 16 **Special Rounds, General Surgery and Specialties**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
 - 17 **Molds and Pollens**
11 a.m.-12 noon—United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
 - 17 **Contact Dermatitis**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
 - 17 **Cardiovascular Aspects of Jogging**
5-6:30 p.m.—Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
 - 17 **Elizabeth Tri-Hospital Hematology Conferences**
8-9 p.m.—St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
 - 17 **Topics in Neurosurgery**
 - 24 4-5 p.m.—VA Hospital, East Orange
(Sponsored by CMDNJ, VA Hospital, East Orange, and AMNJ)
 - 17 **Basic Sciences and Clinical Applications**
 - 24 3:30 p.m.—Burlington County Memorial Hospital, Mount Holly
(Sponsored by Burlington County Memorial Hospital and AAFP)
 - 18 **Sports Medicine**
4:30 p.m.—Holiday Inn, Deepwater
(Sponsored by Salem County Medical Society, AMNJ and AAFP)
 - 18 **Blood Gases**
12 noon—Freehold Area Hospital
(Sponsored by AMNJ and AAFP)
 - 18 **Immuno-Therapy for Lung Cancer**
8-10:30 p.m.—Glen Ridge Country Club
(Sponsored by AMNJ and New Jersey Society of Thoracic Surgeons)
 - 18 **Cardio-Pulmonary Emergencies in Children**
10 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
 - 19 **Endocrinology and Metabolism**
 - 26 Frenchman's Reef Hotel, St. Thomas, Virgin Islands
(Sponsored by AMNJ and CMDNJ-New Jersey Medical School)
 - 19 **Sepsis in Surgery**
10-11 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
 - 22 **Current Treatment of Burns**
8 p.m.—Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
 - 22 **Special Rounds, Surgery**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
 - 23 **Breast Cancer**
1:30-3 p.m.—St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
 - 23 **Adolescent Medicine**
9-11 a.m.—Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)
 - 23 **Common Pediatric Orthopedic Problems**
9-11 a.m.—Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
 - 23 **Depression: Reducing Confusion**
1-3 p.m.—VA Hospital, Lyons
(Sponsored by VA Hospital and AMNJ)
 - 24 **Pediatric Pulmonary Conference**
11 a.m.-12 noon—United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
 - 24 **Preservation of Ischemic Myocardium**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
 - 24 **Elizabeth Tri-Hospital Endocrine Conferences**
8-9 a.m.—St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
 - 24 **Occupational Lung Disease**
10:30 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
 - 28 **Carcinoma of the Cervix**
12 noon-1 p.m.—Overlook Hospital, Summit
(Sponsored by Overlook Hospital and AMNJ)
 - 29 **Special Rounds, Medicine**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- Mar.
- Daily Family Practice Conferences**
12 noon—Hunterdon Medical Center, Flemington
(Sponsored by the Hunterdon Medical Center and AAFP)
 - 1 **Fluid and Electrolyte Imbalance**
11 a.m.—Greystone Park Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
 - 2 **Infertility**
1 p.m.—Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)
 - 2 **Fluid and Electrolyte Imbalance**
11:30 a.m.—Rahway Hospital
(Sponsored by AMNJ and AAFP)
 - 2 **Coagulopathies and Dysproteinemia: Multiple Myeloma and Waldenstroms**
9-11 a.m.—Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)

- 2 **Child Health**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 2 **Special Rounds, Pathology**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 2 **Selected Topics in Gastroenterology**
8-10 p.m. — Valley Hospital, Ridgewood
(Sponsored by NJ Gastroenterology Society)
- 2 **Chronic Obstructive Pulmonary Disease**
- 16 **Acute Renal Failure**
- 30 **Bedside Diagnosis of Heart Disease**
10:30-12 noon — Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
- 2 **Drug-Induced Psychosis**
- 16 **Recent Developments in Mental Health Law**
1-2:30 p.m. — New Jersey Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 2 **Infections in Chronic Renal Failure**
9:15-10:15 a.m. — St. Barnabas Medical Center, Livingston
(Sponsored by AMNJ and St. Barnabas Medical Center)
- 2 **Subjective Sense of Time**
3-4:30 p.m. — Fair Oaks Hospital, Summit
(Sponsored by AMNJ and Fair Oaks Hospital)
- 2 **Care and Treatment of Rheumatic Diseases**
- 9 12:30 p.m. — Burlington County Memorial Hospital
(Sponsored by Burlington County Memorial Hospital and AAFP)
- 16
- 2 **Allergy and Immunology**
- 9 7:30-8:30 a.m. — Alexian Brothers Hospital, Elizabeth
(Sponsored by Alexian Brothers Hospital and AAFP)
- 16
- 23
- 30
- 2 **Cardiology Conference**
- 16 4-6 p.m. — Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)
- 2 **Distinguished Lectures in Ob/Gyn**
8-9 p.m. — The Carriage Trade, East Orange
(Sponsored by CMDNJ and AMNJ)
- 2 **Specialized Techniques in Family Therapy**
7:30-9:30 p.m. — Seton Hall University, South Orange
(Sponsored by AMNJ and New Jersey Center for Family Studies)
- 16
- 23
- 30
- 2 **Anatomy for Surgeons**
- 9 4 p.m.-9 p.m. — Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)
- 16
- 30
- 3 **Elizabeth Tri-Hospital Hematology Conferences**
- 17 8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 3 **Advanced Psychiatric Study Group**
8-10 p.m. — 312 Harding Drive, South Orange
(Sponsored by Group for Advanced Psychiatric Study and AMNJ)
- 3 **Surgical Application in Radioisotope Imaging**
5-6 p.m. — St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)
- 3 **Basic Sciences and Clinical Applications**
- 10 3:30 p.m. — Burlington County Memorial Hospital, Mount Holly
- 17
- 24 (Sponsored by Burlington County Memorial Hospital and AAFP)
- 31
- 3 **Topics in Neurosurgery**
- 10 4-5 p.m. — VA Hospital, East Orange
(Sponsored by CMDNJ, VA Hospital and AMNJ)
- 17
- 24
- 31
- 3 **Diagnosis of Rhinitis**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 3 **Bypass Grafts**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 4 **Renal Transplantation**
8:30 a.m. — United Hospitals of Newark
(Sponsored by AMNJ and AAFP)
- 4 **Community Psychiatry**
1:30-2:30 p.m. — Trenton Psychiatric Hospital
- 11 **Neuroanatomy and Neuropathology**
2:45-3:45 p.m. — Trenton Psychiatric Hospital
- 18 **Clinical Neurology**
4-5 p.m. — Trenton Psychiatric Hospital
(Sponsored by Trenton Psychiatric Hospital)
- 4 **Hospital Ethics Committee — Pro and Con**
8:30-10 p.m. — Bergen Pines County Hospital, Paramus
(Sponsored by Bergen Pines County Hospital, Bergen County Medical Society and AMNJ)
- 4 **Head, Neck, and Jaw Dysfunction**
- 5 9 a.m.-5:15 p.m. — Holiday Inn — Jetport, Elizabeth
(CMDNJ Office of Continuing Education, Piscataway)
- 4 **Current Therapy of Tuberculosis**
12 noon-1 p.m. — St. Mary's Hospital, Orange
(Sponsored by St. Mary's Hospital and AMNJ)
- 4 **Cardiology Conferences**
- 11 7:30-8:30 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 25
- 5 **Advances in Orthopedic Surgery**
- 12 8:30-10:30 a.m. — N.J. Medical School, Newark
- 19 10 a.m.-12 noon — (Third Saturday Only)
- 26 (Sponsored by CMDNJ and AMNJ)

- 5 **Introduction to Family Systems Theory and Therapy**
10 a.m.-12 noon—Seton Hall University
(Sponsored by N.J. Center for Family Studies and AMNJ)
- 7 **Couples Group Therapy**
- 14 7-9 p.m.—Various locations
- 21 (Sponsored by AMNJ and New Jersey Center for
- 28 *Family Studies*)
- 7 **Immunology**
8 p.m.—Community Memorial Hospital, Toms River
(Sponsored by AMNJ and AAFP)
- 7 **Basic Science for Surgeons**
- 14 3-4 p.m.—Martland Hospital, Newark
- 21 (Sponsored by CMDNJ and AMNJ)
- 28
- 7 **Mass Lesions of the Kidneys**
5-6 p.m.—St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)
- 8 **Evaluation Examination for Sports Candidates**
12 noon—West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 8 **Positive Aspects of Aging**
9-10:30 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 8 **Cortical Steroid Therapy**
8 p.m.—Paul Kimball Hospital, Lakewood
(Sponsored by AMNJ and AAFP)
- 8 **Clinical Endocrinology**
9 p.m.—Bayonne Hospital
(Sponsored by AMNJ and AAFP)
- 8 **Nutrition and Family Medicine**
12 noon—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 9 **Joint Conference**
Coachman Inn, Cranford
(Sponsored by the New Jersey Thoracic Society and New Jersey Chapter American College of Chest Physicians)
- 9 **Obstructive Lung Disease**
1:30 p.m.—Runnells Hospital, Berkeley Heights
(Sponsored by AMNJ and AAFP)
- 9 **Current Chemotherapy, Breast Cancer**
1:30-3 p.m.—St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 9 **Management of Patients in Diabetic Coma**
9-11 a.m.—Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)
- 9 **Disorders of Biliary Tract and Pancreas**
9-11 a.m.—Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 9 **Special Rounds, Pediatrics**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 9 **Fifth Joint Conference**
9:30 a.m.-4:00 p.m.—Coachman Inn, Cranford, NJ
(Sponsored by N.J. Thoracic Society, ACCP and AMNJ)
- 9 **Hypertension**
1-3 p.m.—Christ Hospital, Jersey City
(Sponsored by Christ Hospital, AMNJ, and AAFP)
- 10 **Elizabeth Tri-Hospital Endocrine Conferences**
- 24 8-9 a.m.—St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 10 **Urology and Trauma**
5-6 p.m.—St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)
- 10 **Cancer in New Jersey**
9 p.m.—Mountainside Hospital, Montclair
(Sponsored by Essex County Medical Society and AAFP)
- 10 **Combined Endocrinology Seminar**
- 24 **Thyroid Function**
10:30 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 10 **Perennial Allergic Rhinitis, Vasomotor Rhinitis and Serous Otitis Media**
11 a.m.-12 noon—United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 10 **Use and Abuse of Dialysis**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 11 **AAP Spring Meeting**
- 13 Paradise Island Hotel, Nassau, Bahamas
- 12 **The Family Therapist's Own Family**
- 13 9 a.m.-4 p.m.—Holiday Inn, East Orange
(Sponsored by AMNJ and New Jersey Center for Family Studies)
- 14 **Acute Renal Failure**
5-6 p.m.—St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)
- 15 **Breast Cancer**
5:30-6:30 p.m.—St. Mary's Hospital, Orange
(Sponsored by AMNJ and St. Mary's Hospital)
- 15 **Hematology—Diagnosis of Anemia**
12 noon—St. Mary's Hospital, Orange
(Sponsored by AMNJ and AAFP)
- 16 **Bronchial Asthma**
11:30 a.m.-12:30 p.m.—V.A. Hospital, East Orange
(Sponsored by East Orange V.A. Hospital)
- 16 **Physical Medicine in Office Practice**
9-11 a.m.—Middlesex General Hospital

- (Sponsored by Middlesex General Hospital and AAFP)
- 16 **Special Rounds, General Surgery and Specialties**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 16 **Thyroid Diseases**
1 p.m.—Trenton Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
- 16 **Current Advances in Cancer Management**
9-11 a.m.—Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)
- 16 **Forensic Psychiatry**
1-2:30 p.m.—Marlboro Psychiatric Hospital
(Sponsored by Marlboro Psychiatric Hospital and AMNJ)
- 16 **Concepts of Success Phobia**
3-4:30 p.m.—Fair Oaks Hospital, Summit
(Sponsored by AMNJ and Fair Oaks Hospital)
- 17 **Drug Therapy of Upper Respiratory Allergy**
11 a.m.-12 noon—United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 17 **Family Counseling**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 17 **Management of Angina**
5-6:30 p.m.—Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
- 17 **Chronic Nephrosis**
5-6 p.m.—St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)
- 17 **Toxic Factors in Shock**
9:30-10:30 p.m.—Woodbury Country Club, Woodbury
(Sponsored by Gloucester County Medical Society and AMNJ)
- 18 **Sodium and Potassium Metabolism**
9-10 a.m.—St. Francis Medical Center, Trenton
(Sponsored by Hahnemann Medical College and AMNJ)
- 18 **Headache**
12 noon—Freehold Area Hospital
(Sponsored by AMNJ and AAFP)
- 18 **Pediatric Endocrinology**
10 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 19 **Vascular Surgery**
10-11 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 19 **Emergency '77**
8:30 a.m.—Benjamin Franklin High School, Ridgewood
(Sponsored by The Valley Hospital, Ridgewood)
- 19 **Management of Urgent Problems in Vascular Surgery**
9 a.m.-12 noon—Monmouth Medical Center, Long Branch
(Sponsored by Monmouth County Medical Center and AMNJ)
- 21 **Dialysis**
5-6 p.m.—St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)
- 21 **Advance in Medicine—1977**
Cerroamar Hotel, Puerto Rico
(Sponsored by N.J. Academy of Family Physicians)
- 22 **Echo-Cardiography**
8 p.m.—Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
- 22 **Pacemakers**
12 noon—Hospital Center at Orange
(Sponsored by AMNJ and AAFP)
- 22 **Peptic Ulcer Disease**
12 noon—West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 22 **Treatment of Recurrent Breast Cancer**
8-10 p.m.—Englewood Hospital
(Sponsored by The Englewood Surgical Society and AMNJ)
- 23 **Third Annual Cancer Teaching Day**
9 a.m.-5 p.m.—Englewood Hospital
(Sponsored by The Englewood Hospital Association and AMNJ)
- 23 **Current Radiation Therapy, Breast Cancer**
1:30-3 p.m.—St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 23 **Arthritis**
11:30 a.m.—Rahway Hospital
(Sponsored by AMNJ and AAFP)
- 23 **Neurological Diagnosis**
9-11 a.m.—Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 23 **Special Rounds, Internal Medicine**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 23 **Virology and Interferon**
9-11 a.m.—Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)
- 23 **Cancer and the Nervous System**
1 p.m.—VA Hospital, East Orange
(Sponsored by AMNJ, CMDNJ, and VA Hospital)
- 23 **Ischemic Heart Disease**
9:30 a.m.-4 p.m.—Marriott Hotel, Saddle Brook
(Sponsored by AMNJ and American Heart Association, Bergen County Chapter)

- 24 Pediatric Pulmonary Conference**
11 a.m.-12 noon—United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 24 Marriage Counseling**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 24 Fluids and Electrolytes**
5-6 p.m.—St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)
- 25 Gestalt Therapy**
10 a.m.-4 p.m.—Sheraton Heights Hotel, Hasbrouck Heights
(Sponsored by Women's Counseling & Psychotherapy Service of Bergen County and AMNJ)
- 25 Community Psychiatry**
1:30-2:30 p.m.—Trenton Psychiatric Hospital
Psychology
2:45-3:45 p.m.—Trenton Psychiatric Hospital
Forensic Psychiatry
4-5 p.m.—Trenton Psychiatric Hospital
(Sponsored by Trenton Psychiatric Hospital)
- 26 Athletic Injuries**
9 a.m.—Valley Hospital, Ridgewood
(Sponsored by Valley Hospital)
- 28 Acid-Base Balance**
5-6 p.m.—St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)
- 29 Child Abuse**
8-10:30 p.m.—Travelodge, Somerset
(Sponsored by American Academy of Child Psychiatry and AMNJ)
- 30 Hepatitis**
3 p.m.—Fair Oaks Hospital, Summit
(Sponsored by AMNJ and AAFP)
- 30 Aortic Valvular Disease**
9-11 a.m.—Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)
- 30 Respiratory Virus Infections**
9-11 a.m.—Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 30 Clinical Hematology**
9:30 a.m.-4:30 p.m.—St. Michael's Medical Center, Newark
(Sponsored by AMNJ and St. Michael's Medical Center)
- 31 Diagnosis and Treatment of Headache**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 31 The Spleen and Splenectomy**
5-6 p.m.—St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)
- Apr.**
- 1 Community Psychiatry**
1:30-2:30 p.m.—Trenton Psychiatric Hospital
Psychology
2:45-3:45 p.m.—Trenton Psychiatric Hospital
Forensic Psychiatry
4-5 p.m.—Trenton Psychiatric Hospital
(Sponsored by Trenton Psychiatric Hospital)
- 1 The Hospitalized Child**
- 15 Childhood Rheumatoid Disease**
10 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 1 Hypertension**
12 noon-1 p.m.—St. Mary's Hospital, Orange
(Sponsored by AMNJ and St. Mary's Hospital)
- 1 Proper Use of Antibiotics**
8:30 a.m.—United Hospitals of Newark
(Sponsored by AMNJ and AAFP)
- 1 Cardiology Conferences**
- 8 7:30-8:30 a.m.—St. Elizabeth Hospital, Elizabeth**
15 (Sponsored by St. Elizabeth Hospital and AAFP)
- 22**
- 29**
- 2 Advances in Orthopedic Surgery**
- 9 8:30-10:30 a.m.—N.J. Medical School, Newark**
- 16 10 a.m.-12 noon—(Third Saturday Only)**
23 (Sponsored by CMDNJ and AMNJ)
- 30**
- 4 Depression in Adolescent Girl**
8-10 p.m.—60 Melrose Place, Montclair
(Sponsored by Essex Psychiatric Seminar and AMNJ)
- 4 Orthopedic Problems**
8 p.m.—Community Memorial Hospital, Toms River
(Sponsored by AMNJ and AAFP)
- 4 The Practice of Couples Group Therapy**
- 11 7-9 p.m.—Various locations**
(Sponsored by AMNJ and N.J. Center for Family Studies)
- 4 Basic Science for Surgeons**
- 11 3-4 p.m.—Martland Hospital, Newark**
18 (Sponsored by Dept. of Surgery, N.J. Medical School and AMNJ)
- 25**
- 5 Community Medicine Lecture Series**
9:30 a.m.—Overlook Hospital, Summit
(Sponsored by Overlook Hospital and AAFP)
- 5 Headache**
11 a.m.—Greystone Park Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
- 6 Parkinson's Disease and Related Disorders**
9-11 a.m.—Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 6 Special Rounds, Pathology**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)

- 6 **Selected Topics in Gastroenterology**
8-10 p.m. — St. Michael's Medical Center, Newark
(Sponsored by N.J. Gastroenterology Society)
- 6 **Chronic Schizophrenia**
1-2:30 p.m. — N.J. Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 6 **Obstructive Uropathy**
9:15-10:15 a.m. — St. Barnabas Medical Center, Livingston
(Sponsored by AMNJ and St. Barnabas Medical Center)
- 6 **Specialized Techniques in Family Therapy**
7:30-9:30 p.m. — Seton Hall University, S. Orange
(Sponsored by AMNJ and New Jersey Center for Family Studies)
- 6 **Allergy and Immunology**- 13 7:30-8:30 a.m. — Alexian Brothers Hospital, Elizabeth
20 (Sponsored by Alexian Brothers Hospital and AAFP)
27
- 6 **Cardiology Conferences**- 20 4-6 p.m. — Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)
- 6 **Anatomy for Surgeons**- 20 4 p.m.-9 p.m. — Rutgers Medical School, Piscataway
27 (Sponsored by CMDNJ and AMNJ)
- 6 **Distinguished Lectures in Ob/Gyn**
8-9 p.m. — The Carriage Trade, East Orange
(Sponsored by CMDNJ and AMNJ)
- 7 **Elizabeth Tri-Hospital Hematology Conferences**- 21 8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 7 **Basic Sciences and Clinical Applications**- 14 3:30 p.m. — Burlington County Memorial Hospital,
21 Mount Holly
28 (Sponsored by Burlington County Memorial Hospital and AAFP)
- 7 **Neurosurgical Conferences**- 14 4-5 p.m. — VA Hospital, East Orange
21 (Sponsored by CMDNJ, VA Hospital, East Orange,
28 and AMNJ)
- 7 **Hyperlipidemia**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 7 **Advanced Psychiatric Study Group**
8-10 p.m. — 312 Harding Drive, South Orange
(Sponsored by Group for Advanced Psychiatric Study and AMNJ)
- 9 **Fluids and Electrolyte Balance**
10-11 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center & AAFP)
- 10 **Intrauterine Growth Retardation**
11 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center & AAFP)
- 12 **New Developments in Psychiatry and Law**
9-10:30 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center & AAFP)
- 12 **Review and Update of Ob/Gyn**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 12 **Acute and Chronic Hepatitis**
12 noon — West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 12 **Collagen Disease**
8 p.m. — Paul Kimball Hospital, Lakewood
(Sponsored by AMNJ and AAFP)
- 12 **Echo-Cardiography**
9 p.m. — Bayonne Hospital
(Sponsored by AMNJ and AAFP)
- 13 **Proper Use of Blood Gases**
1 p.m. — Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)
- 13 **Current Surgical Techniques, Breast Cancer**
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 13 **Headache**
11:30 a.m. — Rahway Hospital
(Sponsored by AMNJ and AAFP)
- 13 **Cardiac Complications of Antidepressant Drugs and Major Tranquilizers**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 13 **Sedative Management for the General Practitioner**
8:30 a.m.-4:15 p.m. — VA Hospital, East Orange
(Sponsored by AMNJ)
- 13 **Endogenous Rhythms of Activity, CNS**
8:30-10:30 p.m. — Guido's Restaurant, Hackensack
(Sponsored by North Jersey Psychiatric Society and AMNJ)
- 13 **Special Rounds, Pediatrics**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 13 **Therapy of Ambulatory Patients Who Have Had Psychosis**
1-2:30 p.m. — Marlboro Psychiatric Hospital
(Sponsored by Marlboro Psychiatric Hospital and AMNJ)
- 13 **Update on Collagen Disease**
10:30-12 noon — Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
- 14 **Review Symposium — Malpractice**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)

- 14 Drug Allergy**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 14 Inflammatory Bowel Disease**
- 28 Multiple Sclerosis**
10:30 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 14 Elizabeth Tri-Hospital Endocrine Conferences**
- 28 8-9 a.m. — St. Elizabeth Hospital, Elizabeth**
(Sponsored by St. Elizabeth Hospital and AAFP)
- 15 Community Psychiatry**
- 22 1:30-2:30 p.m. — Trenton Psychiatric Hospital**
Mental Deficiency
2:45-3:45 p.m. — Trenton Psychiatric Hospital
Forensic Psychiatry
4-5 p.m. — Trenton Psychiatric Hospital
(Sponsored by Trenton Psychiatric Hospital)
- 15 Scanning**
12 noon — Freehold Area Hospital
(Sponsored by AMNJ and AAFP)
- 16 Emergency Medicine**
8:50 a.m.-2:45 p.m. — Ramada Inn, East Brunswick
(Sponsored by Philippine-American Medical Society and AMNJ)
- 17 Seminar in Medical Humanism**
8:30-10 p.m. — Bergen Pines County Hospital, Paramus
(Sponsored by Bergen Pines County Hospital, Bergen County Medical Society and AMNJ)
- 19 Cardiac Arrhythmias**
12 noon — St. Mary's Hospital, Orange
(Sponsored by AMNJ and AAFP)
- 19 Recent Advances in Cardiology**
8:30-9:30 p.m. — Irvington General Hospital
(Sponsored by Irvington General Hospital and AMNJ)
- 20 Leukemia Patient**
1-5 p.m. — Holiday Inn, Saddle Brook
(Sponsored by Leukemia Society of America, N.J. Chapter, and AMNJ)
- 20 Child Abuse and Neglect**
1 p.m. — Trenton Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
- 20 Pulmonary Pathology in Connective Tissue Disease**
11:30 a.m.-12:30 p.m. — V.A. Hospital, East Orange
(Sponsored by V.A. Hospital, East Orange)
- 20 New Cardiac Drugs**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 20 Special Rounds, General Surgery and Specialties**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 20 New Frontiers in Psychiatry**
- 1-2:30 p.m. — N.J. Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 21 Insect Allergy**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 21 Carcinoma of Lung**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 21 Diagnostic Approaches to the Ischemic Lower Extremity**
5-6:30 p.m. — Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
- 26 Endotoxic Shock**
12 noon — Hospital Center at Orange
(Sponsored by AMNJ and AAFP)
- 26 Gastrointestinal Bleeding**
8 p.m. — Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
- 26 Surgical Treatment of Renal Vascular Hypertension**
8-10 p.m. — Englewood Mens' Club, Englewood
(Sponsored by The Englewood Surgical Society and AMNJ)
- 26 Hyperlipidemia**
12 noon — West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 27 Chemotherapy in Treatment of Breast Cancer**
12 noon-1 p.m. — Englewood Hospital, Englewood
(Sponsored by Englewood Hospital and AMNJ)
- 27 Emotional Crises in Practice**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 27 Special Rounds, Internal Medicine**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 27 Neonatal Infections**
10:30 a.m.-12 noon — Passaic General Hospital
(Hahnemann Medical College and AAFP)
- 27 Lung Cancer**
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 28 Pediatric Pulmonary Conference and Case Presentations**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 28 Use and Abuse of Diuretics**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)

May

- 2 **Emergency Medicine**
8 p.m. — Community Memorial Hospital, Toms River
(Sponsored by AMNJ and AAFP)
- 2 **A Learning-Disabled Adolescent**
8-10 p.m. — 1046 South Orange Avenue, Short Hills
(Sponsored by Essex Psychiatric Seminar and AMNJ)
- 2 **Basic Science for Surgeons**
9 3-4 p.m. — Martland Hospital, Newark
16 (Sponsored by N.J. Medical School and AMNJ)
23
- 3 **Community Medicine Lecture Series**
9:30 a.m. — Overlook Hospital, Summit
(Sponsored by Overlook Hospital and AAFP)
- 3 **Cerebral-Vascular Disease**
11 a.m. — Greystone Park Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
- 4 **Thanatology**
1 p.m. — Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)
- 4 **Sports Medicine**
11:30 a.m. — Rahway Hospital
(Sponsored by AMNJ and AAFP)
- 4 **Low Back Pain**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 4 **Glomerulonephritis**
9:15-10:15 a.m. — St. Barnabas Medical Center, Livingston
(Sponsored by AMNJ and St. Barnabas Medical Center)
- 4 **Special Rounds, Pathology**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 4 **Psychiatric Rehabilitation**
1-2:30 p.m. — N.J. Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 4 **Allergy and Immunology**
11 7:30-8:30 a.m. — Alexian Brothers Hospital, Elizabeth
18 (Sponsored by Alexian Brothers Hospital and AAFP)
25
- 4 **Anatomy for Surgeons**
11 4 p.m.-9 p.m. — Rutgers Medical School, Piscataway
18 (Sponsored by CMDNJ and AMNJ)
25
- 4 **Cardiology Conferences**
18 4-6 p.m. — Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)
- 4 **Distinguished Lectures in Ob/Gyn**
8-9 p.m. — The Carriage Trade, East Orange
(Sponsored by CMDNJ and AMNJ)
- 5 **Fluid and Electrolyte Balance**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center,
Edison
(Sponsored by Kennedy Medical Center)
- 5 **Seminar in Medical Humanism**
8:30-10 p.m. — Bergen Pines County Hospital, Paramus
(Sponsored by Bergen Pines County Hospital, Bergen County Medical Society and AMNJ)
- 5 **Veterinary Allergy**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 5 **Neurosurgical Conferences**
12 4-5 p.m. — VA Hospital, East Orange
19 (Sponsored by CMDNJ, VA Hospital, East Orange,
26 and AMNJ)
- 5 **Elizabeth Tri-Hospital Hematology Conferences**
19 8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 5 **Basic Sciences and Clinical Applications**
12 3:30 p.m. — Burlington County Memorial Hospital,
19 Mount Holly
(Sponsored by Burlington County Memorial Hospital and AAFP)
- 5 **Advanced Psychiatric Study Group**
8-10 p.m. — 312 Harding Drive, South Orange
(Sponsored by Group for Advanced Psychiatric Study and AMNJ)
- 6 **Cardiology Conferences**
13 7:30-8:30 a.m. — St. Elizabeth Hospital, Elizabeth
20 (Sponsored by St. Elizabeth Hospital and AAFP)
27
- 6 **Proper Use of Blood Gases**
8:30 a.m. — United Hospitals of Newark
(Sponsored by AMNJ and AAFP)
- 6 **White Cell Disorders**
10 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 7 **Advances in Orthopedic Surgery**
14 8:30-10:30 a.m. — N.J. Medical School, Newark
21 10 a.m.-12 noon — (Third Saturday Only)
28 (Sponsored by CMDNJ and AMNJ)
- 10 **Genetics**
12 noon — West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 10 **Leukemia**
8 p.m. — Paul Kimball Hospital, Lakewood
(Sponsored by AMNJ and AAFP)
- 10 **Plastic Surgery**
9 p.m. — Bayonne Hospital
(Sponsored by AMNJ and AAFP)
- 10 **What's New in Allergy?**
12 noon — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)

- 11 **Academy of Medicine Annual Awards Dinner**
6 p.m. — Chanticleer, Millburn
- 11 **Thanatology**
1:30 p.m. — Runnells Hospital, Berkeley Heights
(Sponsored by AMNJ and AAFP)
- 11 **Obstructive Lung Disease**
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 11 **Sputum Examination**
11:30 a.m.-12:30 p.m. — V.A. Hospital, East Orange
(Sponsored by East Orange V.A. Hospital)
- 11 **Patient with Advanced Cancer**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 11 **Special Rounds, Pediatrics**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 11 **Role of the Therapist in Psychotherapy**
1-2:30 p.m. — Marlboro Psychiatric Hospital
(Sponsored by Marlboro Psychiatric Hospital and AMNJ)
- 11 **Clinical Shock**
10:30-12 noon — Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
- 12 **Marital Counseling and Gender Identity**
11 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 12 **Elizabeth Tri-Hospital Endocrine Conferences**
26 8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 12 **Management of Diabetes**
26 **Hyperalimentation**
10:30 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 12 **Urticaria and Angioedema**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 12 **Immunology and Asthma**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 13 **Recent Advances in Pediatric Cardiac Surgery**
7:30-10 p.m. — Mayfair Farms, West Orange
(N.J. Society of Thoracic Surgeons and AMNJ)
- 14 **MSNJ Annual Meeting**
17 Haddon Hall, Atlantic City
- 15 **Scientific Session — Section on Family Practice**
16 9 a.m.-4 p.m. — Haddon Hall, Atlantic City
(Sponsored by MSNJ and N.J. Academy of Family Physicians)
- 16 **Diagnosis and Management of Non-Hodgkins Lymphoma**
12 noon-1 p.m. — Overlook Hospital, Summit
(Sponsored by Overlook Hospital and AMNJ)
- 17 **Tuberculosis**
12 noon — St. Mary's Hospital, Orange
(Sponsored by AMNJ and AAFP)
- 18 **What's New in Office Gynecology?**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 18 **Special Rounds, General Surgery and Specialties**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 18 **Pharmacology of Sleep**
1-2:30 p.m. — N.J. Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 19 **Atopic Dermatitis**
11 a.m.-12 noon — United Hospitals of Newark
(Children's Hospital of Newark and CMDNJ)
- 19 **Outpatient Management of Pulmonary Tuberculosis**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 19 **Cellular Engineering in Medicine**
5-6:30 p.m. — Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
- 20 **Diabetes**
12 noon — Freehold Area Hospital
(Sponsored by AMNJ and AAFP)
- 20 **Duodenal-Pancreatic Catheterization**
9-10 a.m. — St. Francis Hospital, Trenton
(Sponsored by Hahnemann Medical College and AAFP)
- 24 **Thanatology**
12 noon — Hospital Center at Orange
(Sponsored by AMNJ and AAFP)
- 24 **Obesity, Prevention and Control**
12 noon — West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 24 **Secretory Immunoglobulins in Diagnosis of GI Carcinoma**
8-10 p.m. — Englewood Mens' Club
(Sponsored by the Englewood Surgical Society)
- 24 **Bleeding Diseases**
8 p.m. — Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
- 25 **Proper Use of Blood Gases**
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)

- 25 **Headache**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 25 **Special Rounds, Internal Medicine**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 25 **Pneumonia: Viral and Bacterial**
10:30-12 noon — Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
- 26 **Pediatric Pulmonary Conference and Case Presentations**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 26 **Preventive Measures in Heart Disease**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)

June

- 1 **Tuberculosis — Outpatient Treatment**
1 p.m. — Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)
- 1 **Special Rounds, Pathology**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 1 **Anatomy for Surgeons**
4-9 p.m. — Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)
- 1 **Allergy and Immunology**
8 7:30-8:30 a.m. — Alexian Brothers Hospital, Elizabeth
15 (Sponsored by Alexian Brothers Hospital and AAFP)
22
- 1 **Distinguished Lectures in Ob/Gyn**
8-9 p.m. — The Carriage Trade, East Orange
(Sponsored by CMDNJ and AMNJ)
- 2 **Advanced Psychiatric Study Group**
8-10 p.m. — 312 Harding Drive, South Orange
(Sponsored by Group for Advanced Psychiatric Study and AMNJ)
- 2 **Elizabeth Tri-Hospital Hematology Conferences**
16 8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 2 **Neurosurgical Conferences**
9 4-5 p.m. — VA Hospital, East Orange
16 (Sponsored by CMDNJ, VA Hospital, East Orange,
23 and AMNJ)
30
- 2 **Pulmonary Function Tests**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)

- 3 **Psychiatry-Medical Surgical Emergencies**
8:30 a.m. — United Hospitals of Newark
(Sponsored by AMNJ and AAFP)
- 3 **Cardiology Conferences**
10 7:30-8:30 a.m. — St. Elizabeth Hospital, Elizabeth
17 (Sponsored by St. Elizabeth Hospital and AAFP)
24
- 4 **Advances in Orthopedic Surgery**
11 8:30-10:30 a.m. — N.J. Medical School, Newark
18 10 a.m.-12 noon — (Third Saturday Only)
25 (Sponsored by CMDNJ and AMNJ)
- 6 **Non-Specific Urethritis**
8 p.m. — Community Memorial Hospital, Toms River
(Sponsored by AMNJ and AAFP)
- 7 **Arthritis**
11 a.m. — Greystone Park Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
- 8 **Special Rounds, Pediatrics**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 8 **Endotoxic Shock**
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 8 **Management of Arrhythmias**
10:30-12 noon — Passaic General Hospital
(Hahnemann Medical College and AAFP)
- 8 **Annual Meeting New Jersey Thoracic Society**
Rutgers Medical School, Piscataway
(Sponsored by New Jersey Thoracic Society)
- 8 **Evolution of the State Hospital Psychiatrist**
1-2:30 p.m. — Marlboro Psychiatric Hospital
(Sponsored by Marlboro Psychiatric Hospital and AMNJ)
- 9 **Proper Use of Blood Gas**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 9 **Elizabeth Tri-Hospital Endocrine Conferences**
23 8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 14 **Chronic Pancreatic Disease**
12 noon — West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 14 **Endocrine Changes in Menopause**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 14 **Pacemakers**
8 p.m. — Paul Kimball Hospital, Lakewood
(Sponsored by AMNJ and AAFP)

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financial assistance to the dependents of a deceased member. It lends money without interest to assist widows and orphans of doctors who have known adversity. For details, write to the Society at P.O. Box 102, Hopewell, New Jersey 08525.

OBITUARIES

Dr. John J. Bedrick

John Joseph Bedrick, M.D., President of The Medical Society of New Jersey in 1965-1966, died suddenly of a heart attack on December 20, 1976. (See editorial comment, page 107, this issue.) Born in 1910, Dr. Bedrick was graduated from Columbia University College of Physicians and Surgeons in 1935. Following internship in Norwalk, Connecticut, he pursued a three-year residency in surgery and pathology at New York City Hospital. Upon completion he served five years in the Medical Department of the United States Army. He returned to his native community, Bayonne, to establish a practice in general surgery and was affiliated in that department at the Bayonne Hospital. He was a Fellow of the International College of Surgeons and a member of the American Society of Abdominal Surgeons. In addition to his terms in the Presidential offices, Dr. Bedrick had been a member of the Board of Trustees for several years and currently was an alternate delegate from New Jersey to the American Medical Association. He had been active in medical affairs at the local level, having served a term as president of the Hudson County Medical Society.

Dr. Bedrick was interested also in civic affairs and served as medical examiner in Hudson County and on the board of directors of the Bayonne Red Cross and the Salvation Army. He was prominent in the Jewish community,

having been president of the Bayonne Jewish Community Center, chairman of the United Jewish Appeal, and chairman of the local chapter of the National Conference of Christians and Jews.

Dr. Jehu P. Cooper, III

At the untimely age of 58, Jehu P. Cooper, III, M.D., died on December 10, 1976 at Riverview Hospital, Red Bank. A graduate of Loyola University Medical School in 1943, he completed an internship and residency in medicine at St. Michael's Medical Center in Newark and then served with the Medical Department of the United States Army until 1947. Following discharge he pursued a residency in pathology at St. Michael's and came to Monmouth County to establish a practice. Dr. Cooper was paralyzed by polio in 1949 but continued, from a wheelchair, to practice general medicine until his most recent illness. He was affiliated with Monmouth Medical Center in Long Branch as well as Riverview Hospital. He had served as physician for the Matawan school system and for the Old Bridge Township police department, and headed the medical section of the Matawan Civil Defense Council.

Dr. Henry B. Decker

On December 24, 1976, Henry Bristol Decker, M.D., a former member and the 161st President of The Medical Society of New Jersey (1953-1954), died in Ostrander, Ohio at the grand age of 83. A graduate of Jefferson Medical College class of 1920, Dr. Decker pursued graduate training in dermatology, becoming board certified in that specialty and ultimately accepting

appointment as professor of dermatology at his alma mater. He also practiced in Camden and was associated with the Cooper Hospital there and the Burlington County Memorial Hospital in Mount Holly. He was a Fellow of the American Academy of Dermatology and a member of the Philadelphia Dermatological Society.

Dr. Peter C. Giordano

At the untimely age of 52, Peter Charles Giordano, M.D., a member of our Bergen County component, died on November 24, 1976. A native of New Jersey, Dr. Giordano had pursued a career in biochemistry and had been a researcher for Schering Corporation for seven years before matriculating at the University of Rome School of Medicine from which he received his doctor of medicine degree in 1962. He returned to the United States and pursued a residency in general practice, which specialty he practiced in Midland Park. Dr. Giordano was affiliated with Fair Lawn Hospital, St. Joseph's Hospital in Paterson, and Valley Hospital in Ridgewood. He was a member of the American Academy of General Practice.

Dr. William R. Hofer

One of Camden County's senior members, William R. Hofer, M.D., died on October 18, 1976 following a cerebral vascular accident. Born in Philadelphia in 1906, Dr. Hofer was graduated from Jefferson Medical College in 1934 and following internship established a general practice in Williamstown which he maintained until retirement in 1969 for reasons of health. During World War II, Dr. Hofer served with the Medical Department of the U.S. Army.

Dr. Michael J. Horan, Jr.

Michael J. Horan, Jr., M.D., a member of our Bergen County component, died on December 13, 1976. Born in 1913 and graduated from New York Medical College, class of 1942, Dr. Horan pursued a fellowship in internal medicine at the Mayo Foundation in Rochester, Minnesota. He returned to New Jersey to

practice that specialty, with special interest in diabetes, and was affiliated with Holy Name Hospital in Teaneck. He was a member of the American Diabetes Association and the American Association for the Advancement of Science.

Dr. Dorothy K. Klughaupt

The first woman to be elected president of the Passaic County Medical Society (1966-67), Dorothy K. Klughaupt, M.D., died on November 13, 1976 after a long illness. A graduate of Emory University, where she received a master's degree in biochemistry, and the Medical College of Georgia, Dr. Klughaupt pursued a three-year residency in pediatrics and general medicine at Bellevue Hospital in New York and came to New Jersey in the early 1940's to establish a general practice in Passaic. She was associated with Passaic General Hospital where she had served a term as president of the medical staff and chairman of the executive board. In 1966 Dr. Klughaupt was named Woman of the Year by the New Jersey Manufacturers Association, and in 1973 the same honor was accorded her by the New Jersey Medical Women's Association. Though retired from active practice she maintained membership on the board of governors at Passaic General Hospital.

Dr. James M. MacKellar

Word has just been received of the sudden death on November 29, 1976, resulting from a myocardial infarction, of James M. MacKellar, M.D., formerly of Tenaflly. Graduated from Cornell Medical School in 1905, Dr. MacKellar pursued a career in surgery and was a Fellow of the American College of Surgeons. He had been affiliated with Englewood Hospital. Following retirement in the 1950's, Dr. MacKellar moved to Whiting and transferred his membership to the Ocean County Medical Society. He was 94 years old at the time of his death.

Dr. Leonor Martinez

Leonor Martinez, M.D., a member of this Society through the Essex County component

since only 1975, died on December 12, 1976 after a brief illness. A native of Bogota, Colombia, South America, Dr. Martinez received her medical degree from the Medical School of the National University of Colombia in 1957. She emigrated to the United States in 1962 and became a research assistant at New York Medical College in New York City. She subsequently took a residency in physical medicine and rehabilitation at Presbyterian Medical Center in New York and since then has been associated with the Kessler Institute for Rehabilitation in West Orange. Dr. Martinez was a member of the American Rheumatism Association.

Dr. Max H. Miller

We have just learned of the death on November 10, 1976, following a long illness, of Max H. Miller, M.D., a member of our Hudson County component. A graduate of the University of Vermont School of Medicine in 1921, Dr. Miller established a practice in surgery with special interest in gynecologic society. He was associated in that department at Christ Hospital in Jersey City and was a member of the American Society of Abdominal Surgeons and of the New Jersey Obstetrical and Gynecological Society. Dr. Miller was 78 years old at the time of his death.

Dr. Robert Stockfisch

On December 2, 1976, Robert H. Stockfisch, M.D., a member of our Monmouth County component died in Monmouth Medical Center where he had long been associated in the department of neuropsychiatry. Born in Brooklyn, Dr. Stockfisch received his medical education from New York University, class of 1918, and practiced in that city until 1952 when he opened an office in Jersey City. He had been on the staff at New York Postgraduate Hospital, as well as clinical instructor there in neurology. In New Jersey his hospital affiliations were with Jersey City Medical Center and the Greenville and Pollak Hospitals in Jersey City. He was a member of the New Jersey and American Psychiatric Associations. Dr. Stockfisch was 81 years old at the time of his death.

Dr. Glicerio D. Sybico

We have just learned of the death in Oakland, California, in May 1976, of Glicerio D. Sybico, M.D., a member of our Essex County component. Born in 1894 and graduated from Boston University College of Medicine in 1924, Dr. Sybico practiced industrial medicine at the New York Naval Shipyard in Brooklyn until illness forced his retirement in 1966.

BOOK REVIEW

**Experimentation: The Fallacy of "Controlled" Drinking
Where Alcoholism Exists.** New York, The Christopher D.
Smithers Foundation, 1974. Pp. 44. (Price not given).

Follow-up studies of alcoholics as far back as 1962 have noted the apparent development of controlled drinking in some few patients. The recent Rand Corporation report drew an unusual amount of criticism because its results were released directly to the press instead of being published in scientific journals, and because it claimed that the majority of improved patients in the sample of those treated eighteen months earlier at federally funded alcoholism treatment centers were either drinking moderately or engaging in alternating periods of drinking and abstinence. Critics of the Rand report pointed out that the news-

paper publicity might cause many abstinent alcoholics to experiment with drinking, resulting in almost inevitable loss of control.

The Smithers Foundation publication is a clearly written exposition of the nature of alcoholic drinking as contrasted to normal drinking. It stresses that sobriety is the key to recovery and that experimentation with controlled drinking can be dangerous and even fatal. Detailed case histories are used to illustrate this position. Originally prepared to rebut the earlier studies, the publication has been brought up to date by the attachment of extracts from newspaper articles on the Rand report and quotations from authorities who speak of the dangers of experimentation.

Alcoholism is a very complex condition, presenting many difficult problems of diagnosis and prognosis which will require much more detailed and careful research than that reported by the Rand Corporation. For the non-specialist physician and his alcoholic patients and their concerned relatives this publication presents a traditional view which has been found most useful in the past and should continue to be of great value.

A. Arthur Sugerman, M.D.

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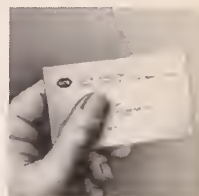
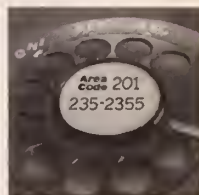


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Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

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H. Eslami, M.D., et al.

Strep Infections in Infants
L. F. Kukla, M.D.

Systemic Vasculitis
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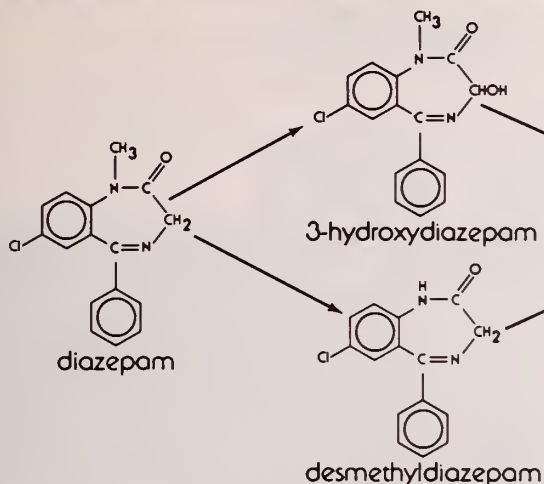
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Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

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EDITORIALS

Anatomical Reorientation

The standard textbooks of anatomy by Grant and Gray and the medical illustrations by Netter and others, on which most of us were trained, contain very few reproductions of horizontal, coronal, or saggital sections of the body. Cross-sectional anatomy has been utilized in the past in a limited way to explain anterior-posterior and left to right interrelationships between structures or to show the flowing course, reflections, and interpositions of the peritoneum, that extensive serous membrane which embraces and envelops the visceral contents of the abdomen and pelvis and lines the parietes of these cavities. The textbooks also show such fundamental descriptions of the reflections of the pleura. Of course we are used to the standard autopsy procedure in which the heart is sliced in horizontal fashion to demonstrate the extent of a myocardial infarction. Pathologists also demonstrate the liver and other organs and solid tumors by a similar technique.

Anatomists can be forgiven this oversight for very practical reasons. To study cross-sectional anatomy routinely would have meant exposing a cadaver to the indignity to which the delicatessen clerk subjects a salami, a task which would prove formidable if one hoped to deliver more than a few cuts. Furthermore, death and post-mortem changes tend to present some modest but definite deviations in position which are likely to vary a bit from the living patient. All of this has changed, however, due to recent advances in diagnostic radiology mainly through computed tomography (CT) and ultrasonography. The latter can display remarkable images of internal structures by means of both longitudinal and transverse pulse echo techniques under static circumstances. Present research in ultrasonography, however, suggests imminent clinical utility of this method for kinetic analyses of living structures such as the heart valves and the myocardium.

Computed tomography (CT) provides a picture of a thin, uniform section of a complex object (the cranium and its contents, the thorax and its

contents, or the abdomen and pelvis and their contents) where the x-ray is taken perpendicular to the slice. A typical procedure is to scan two contiguous sections of the part of the body one is studying by making multiple observations of the area from different directions. The data from these observations (25,600 or more for the head scanner and at least 102,400 observations for the body scanner) are fed into a computer which provides an instant reconstructed image of each slice.* The time span for CT scanning is remarkably short—two minutes for one scan (two contiguous slices) of the head and two-and-one-half minutes for the chest or abdomen of an adult.**

The primary physician, surgeon, and surgical subspecialist (especially the neurosurgeon) now have a remarkable tool which will revolutionize the study of anatomy and pathology in the living patient. The complete physician henceforth will need to reorient his thinking from the traditional surgical anatomy of Gray and the autopsy anatomy and pathology to the horizontal, coronal, and saggital anatomy of the C-T scanner and ultrasonography. This obviously means that medical schools must add these features to the basic study of anatomy—and many have already done so.

The practitioner who graduated from medical school a year or more in the past, now faces another subject for continuing medical education. Obviously the radiologist can define the patient's aberrations for us, but it should be much more satisfying to the clinician who becomes anatomically reoriented to study his own CT scans.

The cover photo displays two CT scans cut through the pelvis at the level of the heads of the femurs. The upper one is a unique reproduction of a hip fracture with pin fixation. The angular lines, which demonstrate the movement of the CT scanner, show up in this fashion because the computer is not programmed to handle the difference in density between the metal pin and bone. The lower image shows metastatic carcinoma in the head of the left femur. A.K.

*Marshall CH: Principles of computed tomography. *Post-graduate Medicine* 60:105-109, August, 1976.

**Δ-Scan, Ohio-Nuclear, Inc., Solon, Ohio. Descriptive brochure.

Physicians' Relief Fund

Are you aware of the Physicians' Relief Fund and its provisions to assist former dependents of deceased members of The Medical Society of New Jersey? You may be acquainted with or hear of a deceased colleague's widow who has come upon misfortune. If so, you may sponsor a grant application for financial aid for such an individual.

A physician's wife makes a major contribution to the health of patients through the silent acceptance of her consort's duties and responsibilities. Although it is rare, a physician sometimes fails to make adequate provision for his widow and family. Our wives—proud ladies who tend to espouse an independent course when tragedy strikes—may be reluctant to seek financial aid under such circumstances. The MSNJ Physicians' Relief Fund provides for financial grants to qualified applicants. An application must originate in the county where the physician maintained his membership and must be approved by the governing body of that Society. It is then investigated, reviewed, and passed upon by our Board of Trustees.

County components and individual members should review the rules of the Relief Fund and keep alert for potential applicants. A.K.

The Demise of Public Health Medicine in New Jersey

Public health *medicine* in New Jersey is dead. It has been replaced by public health regulation.

Those of us who were privileged to participate in the public health movement over the past two decades now recognize what a golden era has come and gone. Recitation of the concepts, the programs, the names of the public health officials and the workers of that period can

lead one who had a finger in the action to feel proud of the accomplishments and dismayed at the subsequent turn of events.

In 1953, the New Jersey State Legislature passed a Chronic Illness Law which brought our State into the mainstream of public health efforts aimed at disease detection, prevention, and control. The U.S. Public Health Service developed enlightened programs which emphasized a cooperative spirit between the state and national health services for the good of its citizens. Since New Jersey did not have a medical school at that time, our public health leaders recognized the need to change the character of the state public health service from a bureau to a department with relevant divisions. Names like Daniel Bergsma, Carl Weigele, Marion Stanford, Roscoe P. Kandle, and William Dougherty will not be forgotten.

Public health in the fifties and sixties was exciting, innovative, academic, practical, and instructive. Novel concepts and new methodology were investigated and applied. In those days, our health department trained professionals in New Jersey for the U.S. Public Health Service for assignment all over the country. The harmony between the state health department, The Medical Society of New Jersey and its twenty-one county component societies, and the many other statewide and local governmental and voluntary agencies was nothing less than remarkable. There was a spirit of mutual respect on both an official and individual basis.

The accomplishments of those days are legendary. The availability of the Papanicolaou test made public health programs for early detection of cancer a reality. The extensive, national lung-cancer death-rate study clearly implicated cigarette smoking as a primary etiological factor and led to Congressional legislation in 1965 which required cartons and packages to warn: "Caution: cigarette smoking may be hazardous to your health." Wilkerson's epidemiological studies in Oxford, Massachusetts established prevalence and incidence rates of diabetes; soon thereafter, sensitive and reliable blood glucose technology permitted mass screening of populations for undetected diabetes.

Rheumatic fever prophylaxis became a major public health and medical interest. The recognition of the role of genetic and dietary factors and hyperlipidemia in coronary heart disease, and the applications of the epidemiological information from the Framingham heart study led to an active heart disease control program. The Regional Medical Program, through its attack on cancer, stroke, and heart disease, added strength to this area and brought about training of physicians and other professionals in cardio-pulmonary resuscitation, and the training of I.C.U. and C.C.U. nurses. The catalog of activities in infectious and contagious diseases, especially tuberculosis and venereal disease control, was extensive. Multiphasic screening for undetected diseases was made possible by the availability of automated sequential chemical analysis of large numbers of blood samples.

The list went on and on—until the immediate past New Jersey Governor began to politicize the health department and the present regime completed the task. This caused fundamental change in the character of the department, which since has become obsessed with controls, edicts, and pressures on all the non-govern-

mental health agencies in our state. The ostensible bases for the shift in this direction are cost control and efficiency in the "delivery of health care," while maintaining high quality, a laudable but unlikely set of goals.

medically-oriented, well-trained public health professionals of yore have been replaced by an administrative army of "regulators," whose knowledge of health is slight, but whose devotion to bureaucratic commandments is unswerving. Their attitudes have placed the New Jersey State Department of Health in an adversary position in relation to organized medicine. The partnership of two decades ago has been replaced by a frustrating, insulting, unidirectional non-relationship. It has become clear that a new era is upon us. The presence of two medical schools—and a third on the horizon—means that *public health medicine* must move back to the university and to organized medicine through The Medical Society of New Jersey. It also magnifies the fact that the health of each patient and family depends on the art and the science of medicine as practiced by physicians. While the regulators regurgitate pressurized canons, we must prevent and treat disease and educate our patients. A.K.



Cover Photo

The CT scans on our cover photo (see editorial, page 209, this issue) were made available by Gabriele L. Villa, M.D., Director of the Radiology Department, Mercer Medical Center, Trenton. The photographs were prepared by Nicholas J. Palakow, supervising radiologic technologist, Mercer Medical Center. Mr. Palakow received a Certificate of Merit from the *Trenton Times* photo contest and has exhibited his works in private showings.



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Five renal artery stenoses in 72 kidney transplants (6.9 percent) are reported. Stenosis occurred in 7.1 percent of kidneys from related living donors and 6.8 percent from cadaver donors. Intractable hypertension, vascular murmur, and hyperreninemia should arouse a suspicion of renal artery stenosis. High-grade stenosis caused no deterioration of kidney function. When the kidney function declined it was due to rejection and surgery did not avert final loss of the kidney. Although an intraperitoneal approach for repair is easier, the retroperitoneal route is preferred because it gives more information about other structures. Repair can be accomplished by resection of the stenosis and reanastomosis, bypass, or patch angioplasty. The high incidence of recurrence following patch angioplasty renders this method undesirable.

Stenosis of the Renal Artery in Human Kidney Transplantation*

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Renal artery stenosis following kidney transplantation is one of the causes of hypertension in the recipient. Since the response of this form of renovascular hypertension is poor to medical treatment but excellent with corrective surgery, its diagnosis is extremely important.

Material and Method

From September, 1968 to September, 1975 one hundred sixty-five kidney transplants have been performed. After separating patients with kidneys lost due to rejection or infection, those recipients who died, and those with a short period of observation, 72 patients were suitable for study.

Post-transplant angiography was not done routinely, but was indicated for intractable hypertension responding poorly to medical treatment, unexplained deterioration of kidney function, and the appearance of a murmur in the kidney transplant fossa. Arteriograms were obtained by retrograde catheterization of the femoral artery contralateral to the transplant vessels. This method allowed selective study of renal artery, its anastomosis, and the intrarenal vessels.

Surgical Correction

The stenotic artery was exposed extraperitoneally in all patients. The renal artery and vein

were isolated, and after the renal artery was clamped the kidney was cooled immediately by injecting 150 ml of cold lactated Ringer's solution through the artery. The renal vein was occluded immediately after perfusion. The kidney was kept continuously hypothermic by pouring cold lactated Ringer's solution on enveloping packs. With the exception of the patient in case one the remaining patients were operated on at a time when another compatible kidney was available in the organ preservation laboratory for retransplantation in the event the artery could not be repaired, and the kidney had to be removed. The available kidney, if not used, was transplanted in another prepared recipient. Two weeks following surgical correction of the stenosis, arteriography was repeated.

Results

Five of the 72 patients developed arterial stenosis, (6.9 percent), which was diagnosed one to seven months after kidney transplantation. Pertinent features of the five case histories are presented below:

Case 1 — A 45-year-old man received a cadaver kidney transplant on August 9, 1972 and was discharged six weeks later. His BUN was 38 mg/dl, serum creatinine 1.6 mg/dl, and blood pressure 120/90 mm Hg. Thereafter, there was a gradual rise in blood pressure and decline in kidney function. On December 5 his blood pressure was 180/120 despite medical treatment, BUN was 112 and creatinine 3.5 mg/dl. Angiography on December 14 showed renal artery stenosis (Figure 1) while surgery the next day revealed a thick renal artery with a narrow lumen.

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Figure 1. — Arteriography of patient #1 showing stenosis of internal iliac-renal system.

Surgical correction was impossible and the kidney was removed. Histological sections showed uniform intimal proliferation of small and large arteries typical of vascular rejection (Figure 2). He subsequently received a second kidney and did well.

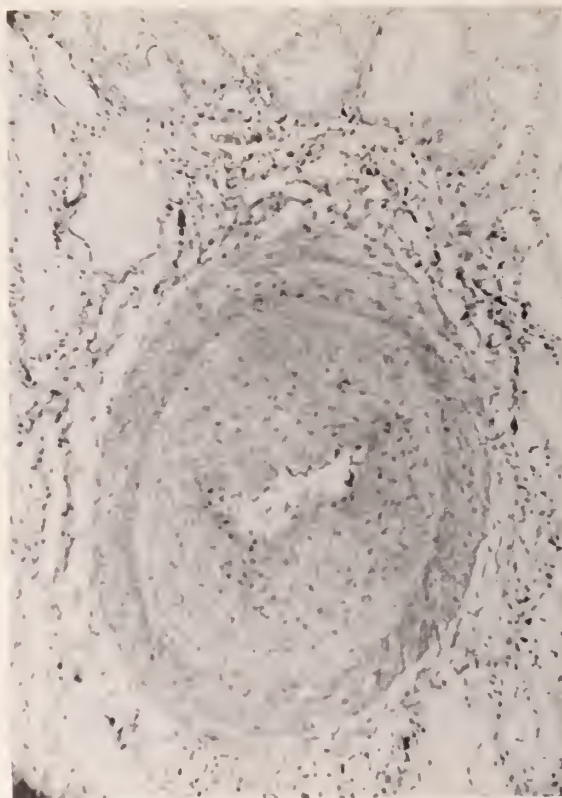


Figure 2. — Microphotograph of kidney of patient #1 showing marked endothelial proliferation of a medium-sized artery.

Case 2 — A 40-year old woman received the left kidney of her fraternal twin on March 14, 1973. Although the kidney functioned immediately, two acute rejections were treated with injections of methyl prednisolone succinate on the third and 20th postoperative days. Angiograms 15 days after surgery revealed no vascular abnormality. She was discharged on April 25 with a BUN of 35 and serum creatinine of 1.5 mg/dl. The patient was readmitted on June 25 for hypertension and a decline of kidney function. On admission BUN and serum creatinine were 82 and 3.6 mg/dl respectively. Arteriography three days later showed stenosis of renal artery (Figure 3). Plasma renin determinations on April 2 and 20 were 6.9 and 4.0 ng angiotensin I/ml/hr., (normal value 2 to 6 ng angiotensin I/ml/hr. with patient in erect position for 3 hours prior to test and on 10 mEq sodium diet). On June 29 resection of a suture line stenosis with an end-to-end anastomosis of internal iliac to renal artery was performed through a retroperitoneal approach. Arteriography on the 10th postoperative day showed a widely patent anastomosis (Figure 4). Kidney function improved and hypertension was easily controlled after surgery, but during ensuing months, kidney function deteriorated slowly. Arteriography three months after surgical revision showed no stenosis, but a "pruned tree" appearance of the intrarenal arteries (Figure 5). The patient was returned to hemodialysis on February 4, 1974, eleven months after transplantation, due to chronic rejection of the kidney.



Figure 3. — Arteriography of patient #2 demonstrates stenosis of renal artery.

Case 3 — A 27-year-old man received a cadaver kidney transplant on June 26, 1974, and was discharged from the hospital on July 31, 1974 with a blood pressure of 130/80



Figure 4. — Arteriography of patient #2 ten days after the repair of stenosis showing widely patent internal iliac-renal artery system.

mm Hg, BUN of 44, and serum creatinine of 2.5 mg/dl. On October 1 a rise in blood pressure was noted, and by November 12 his blood pressure was 200/130 mm Hg despite active medical treatment. Renin determination on several occasions was high (5.6 to 14.5 ng angiotensin I/ml/hr.). Arteriography revealed anastomotic renal artery stenosis. On November 22 through an extraperitoneal approach the stenosis was resected, and an end-to-end anastomosis performed. Postoperative renin was 2.2 ng angiotensin I/ml/hr. Blood pressure was easily manageable by medication thereafter; BUN was 20 and serum creatinine 2.2 mg/dl.

Case 4 — A cadaver kidney transplantation was done on a 33-year-old man on April 26, 1974. He was released from the hospital June 15 with a blood pressure of 150/95 mm Hg, BUN of 16, and serum creatinine of 1.9 mg/dl. On October 29 blood pressure was 200/120 with no change in BUN or serum creatinine. One preoperative renin determination was normal. Arteriography on December 19 showed a long segmental stricture at the internal iliac renal artery system (Figure 6). Despite the severe stenosis, kidney function remained unchanged; BUN 15 and creatinine 1.4 mg/dl. On March 14, 1975 through an extraperitoneal approach, a long segment of renal artery encased in dense fibrous tissue was released and a new anastomosis of the renal and internal iliac arteries performed (Figure 7). Postoperatively the blood pressure was 150/100 mm Hg without medication; BUN was 12 and serum creatinine 1.2 mg/dl.

Case 5 — A paternal kidney transplantation was performed on a 16-year-old girl on March 12, 1975. Hypertension and a tendency to salt retention were noted during the third post-transplant week. Angiography on April 14 showed an anastomotic structure. Her BUN was 22 and creatinine 1.2 mg/dl. On April 22, through an extraperitoneal approach, the stenosis was resected and an end-to-end anastomosis done. Postoperatively the blood pressure was easily con-



Figure 5. — Arteriography of patient #2 three months after revision. Anastomosis of internal iliac to renal artery is widely patent. Note pruned-tree appearance of intra-renal vessels.

trolled with medication; BUN was 16 and the creatinine, 1.2 mg/dl. The preoperative renin of 9.09 to 22.8 ng angiotensin I/ml/hr. dropped postoperatively to 1.76 ng/ml/hr.

Discussion

Renal artery stenosis after kidney transplantation occurs in one to twelve percent of cases.^{1, 2} Doyle studied 1,161 kidney transplant patients with hypertension and found 60 patients (five percent) with renal artery stenosis.¹ In our group of 72 patients, five developed renal artery stenosis (6.9 percent). The interval between the transplantation and diagnosis of stenosis was one to seven months for a mean interval of four months.

In most reported series only symptomatic patients have been studied. LaComb, who performed routine angiography, found 23 of 100 patients with evidence of renal artery stenosis; two had no clinical findings whatsoever.³ To our knowledge, no other report of routine serial arteriography in every patient is available.

The types of arterial stenosis are shown in Table 1. The exact site and extent of stenosis cannot be diagnosed accurately by arteriography in all



Figure 6. — Arteriography of patient #4 shows stenosis of internal iliac-renal artery system.



Figure 7. — Arteriography of patient #4 after repair of stenosis.

cases. The angiograms in case one, for example, favored a correctable stenosis (Figure 1), but generalized intimal proliferation was found which could not be corrected surgically. The deceptiveness of angiographic findings has been stressed by others.^{4,7}

Stenoses may occur in kidneys from both related living donors and cadaver donors. According to LaComb stenosis occurred in 5.8 percent of related and 17.7 percent of cadaver donors.³ This was confirmed by Doyle and his colleagues, who reported 5.5 percent in related living donors and 15.4 percent in cadaver donors.¹ Contrariwise, three of four stenoses reported by Lindsey were

in kidneys from related living donors.⁵ Stenosis of the renal artery occurred in three of 44 cadaver kidneys (6.8 percent) and two of 28 living donor kidneys (7.1 percent) in this series.

Damage to the renal artery during the perfusion and preservation of the cadaver kidney has been implicated as one of the reasons for post transplant stenosis.^{2,3,6} In our patients, the equal occurrence of stenoses in related living kidneys, where there is little handling of the artery, and cadaver kidneys, where there is cannulation of the renal artery and machine perfusion for many hours, is not consistent with this implication. Although the arterial damage during perfusion may contribute to stenosis, routine resection of the renal artery damaged by a tourniquet applied during the perfusion can prevent this complication, a fact borne out by the experience of others.^{2,5}

Lindsey reported a good correlation between hyperreninemia and renal artery stenosis.⁵ Four of our patients had renin studies. In three, hyper-

Table I
Types of Renal Artery Stenosis in Kidney Transplantation

Intrinsic	Arteriosclerotic Plaques
	Intimal Proliferation
	Suture Line Stenosis
Extrinsic	Encasement
	Kinking
	Torsion

reninemia reverted to normal after repair of the stenosis; the fourth never showed a rise in plasma renin activity. Hyperreninemia is important in making a diagnosis of renal artery stenosis, but we have observed one of the highest plasma renin levels (22 ng angiotensin I/ml/hr) in a patient with no stenosis and hypertension. Occasionally plasma renin may be normal in patients with proved stenosis (Case four). Therefore, the significance of hyperreninemia should be evaluated in the light of other findings in each patient.

The presence of a murmur in the area of kidney transplant is considered to be important in the diagnosis of renal artery stenosis.⁶⁻⁸ We and others have found murmurs in otherwise asymptomatic patients.⁵ However, the presence of a murmur not heard previously should suggest a renal artery stenosis.

The five arterial stenoses reported occurred following an end-to-end anastomosis. Of the 72 patients studied in this report, 62 had an end-to-end anastomosis of the renal to the internal iliac artery, eight had an end-to-side anastomosis to the external iliac artery, and two had one renal artery anastomosed end-to-end to the internal iliac and the second end-to-side to the external iliac arteries. Stenosis is less likely to occur when an end-to-side anastomosis is made from the renal artery, with an attached cuff of aorta, to the external iliac artery.

If possible it is desirable to have a compatible kidney available on the preservation machine when corrective surgery is undertaken, in the event the vascular lesion cannot be repaired. This policy was not in effect, at the time the patient in case one was operated, so a third operation became necessary to transplant a new kidney.

The stenotic area can be approached extraperitoneally or intraperitoneally. The intraperitoneal approach is easier and requires a shorter operating time. The more difficult extraperitoneal dissection, however, allows the surgeon to examine kidney, ureter, and vessels. Biopsies can be taken, it is easy to control the renal vessels for cooling the kidney during ischemia and to do a new renal transplant, if

necessary. The kidney can be cooled by perfusing 150 ml. of cold lactated Ringer's solution through the opened anastomosis followed by immediate occlusion of the renal vein to prevent the backing of blood into the kidney through the vein. In patient three the renal artery ruptured before the dissection was complete and with 42 minutes of cold ischemia. No postoperative difficulty occurred and the kidney resumed function immediately.

Stenosis of renal artery has been corrected by (1) resection of stenosis and reanastomosis, (2) vein bypass from the aorta or iliac artery to the renal artery distal to stenosis, and (3) vein patch angioplasty. However, the vein patch should be abandoned due to a recurrence rate of 60 to 100 percent.¹⁻⁴ Bypass of the stenotic area by autogenous veins has given excellent results.²

In this series, one patient had a non-correctable lesion. The remaining four had a resection of the stenosis and a new end-to-end anastomosis with no recurrence. Improvement of kidney function, after the correction of the stenosis, has been reported.^{3, 5, 9} Two of our patients showed impaired kidney function: Patient one had extensive and generalized vascular rejection (Figure 2), and patient two showed temporary improvement postoperative, followed by gradual deterioration due to persisting chronic rejection. This patient had to return to hemodialysis eight months later even though the artery remained patent. The other three patients, who showed no deterioration of function, responded well following surgery with sustained good kidney function.

Although Simmons reported severe deterioration of kidney function when stenosis of the renal artery occurred,¹⁰ in our series the associated decline in renal function was due to concomitant rejection and the course of chronic rejection was not altered by repair of arterial stenosis. Conversely, when no rejection accompanied the stenosis, even when there was 95 percent stenosis of the renal artery (case four), no deterioration of kidney function was observed.

These observations suggest, therefore, that stenosis of renal artery accompanied by loss of function be evaluated more carefully. Kidney biopsy and careful angiographic study of in-

trarenal vessels may help to differentiate between technical anastomotic renal artery stenosis and the stenosis due to renal rejection.

Summary

Five instances of renal artery stenosis occurred in 72 kidney transplants (6.9 percent), two were in living donor kidneys (7.1 percent) and three in cadaver kidneys (6.8 percent).

Refractory hypertension, a vascular murmur, and hyperreninemia should arouse suspicion that stenosis is present, but this must be confirmed by arteriography. Stenosis alone was not accompanied by a decline in renal function even with marked narrowing of the lumen. When functional deterioration occurred, it was caused by concomitant rejection.

Since there was a similar incidence of stenosis in related living donor kidneys and cadaver kidneys cannulation and perfusion do not seem to be important etiological factors.

Surgical resection by an extraperitoneal approach and reanastomosis is indicated. A kidney should be available for transplantation at the time of surgery if correction is not feasible.

Three of five patients had excellent results following surgical correction. One patient with a non-correctable generalized arterial narrowing due to rejection underwent nephrectomy and another patient, with concomitant chronic rejection,

was returned to hemodialysis. Correction of renal artery stenosis, accompanied by chronic rejection as proved by angiography and biopsy, does not alter the grave course of rejection.

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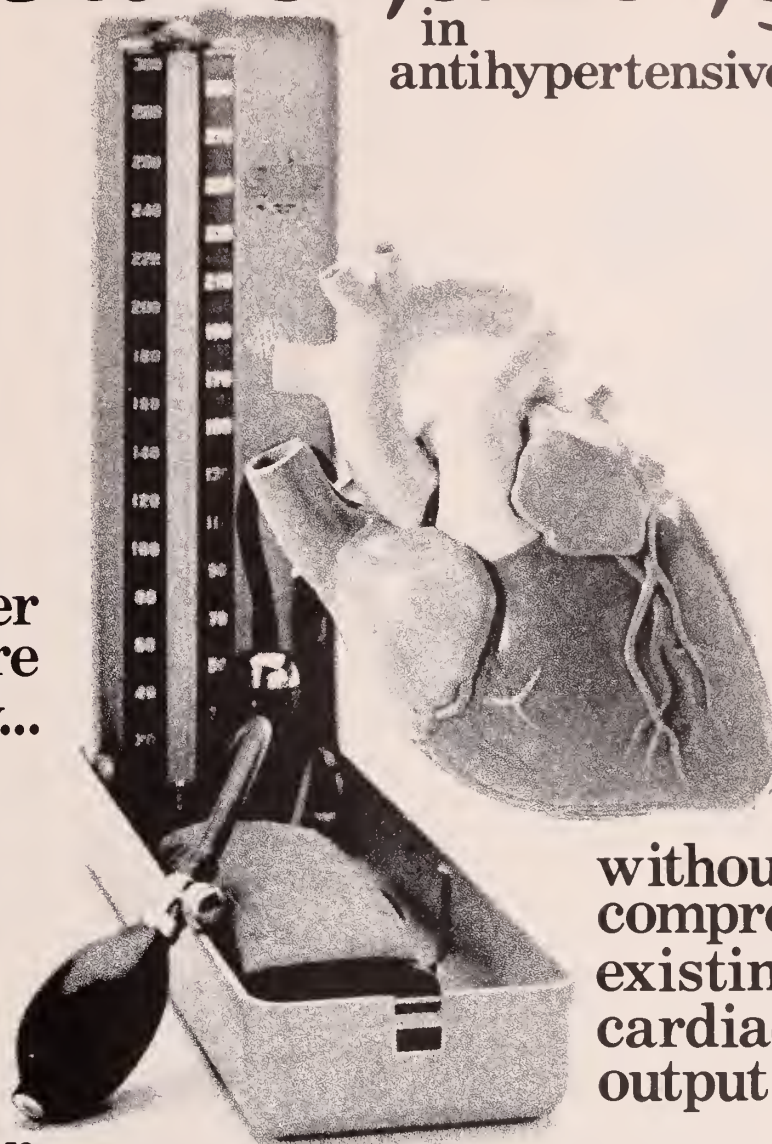
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With prolonged methyldopa therapy, 10% to 20% of patients develop a positive direct Coombs test, usually between 6 and 12 months of therapy. Lowest incidence is at daily dosage of 1 g or less. This on rare occasions may be associated with hemolytic anemia, which could lead to potentially fatal complications. One cannot predict which patients with a positive direct Coombs test may develop hemolytic anemia. Prior existence or development of a positive direct Coombs test is not in itself a contraindication to use of methyldopa. If a positive Coombs test develops during methyldopa therapy, determine whether hemolytic anemia exists and whether the positive Coombs test may be a problem. For example, in addition to a positive direct Coombs test there is less often a positive indirect Coombs test which may interfere with cross matching of blood.

At the start of methyldopa therapy, it is desirable to do a blood count (hematocrit, hemoglobin, or red cell count) for a baseline or to establish whether there is anemia. Periodic blood counts should be done during therapy to detect hemolytic anemia. It may be useful to do a direct Coombs test before therapy and at 6 and 12 months after the start of therapy. If Coombs-positive hemolytic anemia occurs, the cause may be methyldopa and the drug should be discontinued. Usually the anemia remits promptly. If not, corticosteroids may be given and other causes of anemia should be considered. If the hemolytic anemia is related to methyldopa, the drug should not be reinstituted. When methyldopa causes Coombs positivity alone or with hemolytic anemia, the red cell is usually coated with gamma globulin of the IgG (gamma G) class only. The positive Coombs test may not revert to normal until weeks to months after methyldopa is stopped.

Should the need for transfusion arise in a patient receiving methyldopa, both a direct and an indirect Coombs test should be performed on his blood. In the absence of hemolytic anemia, usually only the direct Coombs test will be positive. A positive direct Coombs test alone will not interfere with typing or

cross matching. If the indirect Coombs test is also positive, problems may arise in the major cross match and the assistance of a hematologist or transfusion expert will be needed.

Fever has occurred within first 3 weeks of therapy, sometimes with eosinophilia or abnormalities in liver function tests, such as serum alkaline phosphatase, serum transaminases (SGOT, SGPT), bilirubin, cephalin cholesterol flocculation, prothrombin time, and bromsulphalein retention. Jaundice, with or without fever, may occur, with onset usually in the first 2 to 3 months of therapy. In some patients the findings are consistent with those of cholestasis. Rarely fatal hepatic necrosis has been reported. These hepatic changes may represent hypersensitivity reactions; periodic determination of hepatic function should be done particularly during the first 6 to 12 weeks of therapy or whenever an unexplained fever occurs. If fever and abnormalities in liver function tests or jaundice appear, stop therapy with methyldopa. If caused by methyldopa, the temperature and abnormalities in liver function characteristically have reverted to normal when the drug was discontinued. Methyldopa should not be reinstituted in such patients.

Rarely, a reversible reduction of the white blood cell count with primary effect on granulocytes has been seen. Reversible thrombocytopenia has occurred rarely. When used with other antihypertensive drugs, potentiation of antihypertensive effect may occur. Patients should be followed carefully to detect side reactions or unusual manifestations of drug idiosyncrasy.

Use in Pregnancy: Use of any drug in women who are or may become pregnant requires that anticipated benefits be weighed against possible risks; possibility of fetal injury can not be excluded.

Precautions: Should be used with caution in patients with history of previous liver disease or dysfunction (see Warnings). May interfere with measurement of: uric acid by the phosphotungstate method, creatinine by the alkaline picrate method, and SGOT by colorimetric methods. Since methyldopa causes fluorescence in urine samples at the same wavelengths as catecholamines, falsely high levels of urinary catecholamines may be reported. This will interfere with the diagnosis of pheochromocytoma. It is important to recognize this phenomenon before a patient with a possible pheochromocytoma is subjected to surgery. Methyldopa is not recommended for patients with pheochromocytoma. Urine exposed to air after voiding may darken because of breakdown of methyldopa or its metabolites.

Stop drug if involuntary choreoathetotic movements occur in patients with severe bilateral cerebrovascular disease. Patients may require reduced doses of anesthetics; hypotension occurring during anesthesia usually can be controlled with vasopressors. Hypertension has recurred after dialysis in patients on methyldopa because the drug is removed by this procedure.

Adverse Reactions: Central nervous system: Sedation, headache, asthenia or weakness, usually early and transient; dizziness, lightheadedness, symptoms of cerebrovascular insufficiency, paresthesias, parkinsonism, Bell's palsy, decreased mental acuity, involuntary choreoathetotic movements; psychic disturbances, including nightmares and reversible mild psychoses or depression.

Cardiovascular: Bradycardia, aggravation of angina pectoris. Orthostatic hypotension (decrease daily dosage). Edema (and weight gain) usually relieved by use of a diuretic. (Discontinue methyldopa if edema progresses or signs of heart failure appear.)

Gastrointestinal: Nausea, vomiting, distention, constipation, flatus, diarrhea, mild dryness of mouth, sore or "black" tongue, pancreatitis, sialadenitis.

Hepatic: Abnormal liver function tests, jaundice, liver disorders.

Hematologic: Positive Coombs test, hemolytic anemia. Leukopenia, granulocytopenia, thrombocytopenia.

Allergic: Drug-related fever, myocarditis.

Other: Nasal stuffiness, rise in BUN, breast enlargement, gynecomastia, lactation, impotence, decreased libido, dermatologic reactions including eczema and lichenoid eruptions, mild arthralgia, myalgia.

Note: Initial adult dosage should be limited to 500 mg daily when given with antihypertensives other than thiazides. Tolerance may occur, usually between second and third month of therapy; increased dosage or adding a thiazide frequently restores effective control. Patients with impaired renal function may respond to smaller doses. Syncope in older patients may be related to increased sensitivity and advanced arteriosclerotic vascular disease; this may be avoided by lower doses.

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Although Group A Beta streptococcal pharyngitis has been extensively studied, many of the phenomena associated with streptococcal pharyngitis, particularly in infants, have not been clarified. During a period of expected streptococcal infection, 113 children under one year of age, who presented with fever and/or upper respiratory symptoms, had throat cultures performed for Group A streptococci. No positive cultures were obtained although streptococcal infection was documented in the community by the presence of positive cultures in children greater than one year of age and adult patients.

Incidence of Group A Beta Streptococcal Pharyngitis in Infants

Leon F. Kukla, M.D., Newark*

The classic study of Powers and Boisvert¹ in 1944 on streptococcal infection in infants and children is often quoted. Standard texts^{2,3,4} state that streptococcal infection is uncommon in infancy and when it does occur, it is a protracted four to six-week course of fever and rhinorrhea rather than pharyngitis. In the study by Alpert, *et al.*, which showed that streptococcal infection could not be correlated with exudate alone, only fourteen percent of children less than three years of age with exudated pharyngitis had streptococcal infection.⁵ Unfortunately, their report does not state how many patients were actually infants.

In an extensive private office experience, Breese found only seven and one-half percent of 2,201 cultures in children less than two years of age were positive.⁶ Again, there was no mention of actual age breakdown for infants. The data might also be questioned on completeness for identification since no mention is made of whether the colonies were grown in ten percent carbon dioxide as well as aerobic conditions and whether the colonies were further identified by antibiotic sensitivity. The particular value of Breese's data is that they showed, as others have demonstrated, the significance of the number of colonies as an indication of active infection.

In another extensive study on streptococcal infection by Kaplan, *et al.*, no children under one year of age were identified with Group A Beta hemolytic streptococcal infection; the

sample was small, however, with only 29 children under one year of age.⁷

Many sick infants present with fever, rhinorrhea and pharyngeal inflammation and are empirically treated with antibiotics. The purpose of our study was to document the etiologic role, if any, of Group A Beta hemolytic streptococcal infection in pharyngitis in infancy.

Method: Children under one year of age who presented in the pediatric clinic or pediatric emergency room between mid-November, 1974 and mid-March, 1975 with upper respiratory symptoms or fever greater than 101°(R) were subjected to a throat culture. Cultures were performed in the hospital bacteriology laboratory under ten percent carbon dioxide on five percent sheep cell blood agar plates. Colonies were further identified by bacitracin disc sensitivity. A positive culture was defined as greater than twenty percent of the colonies as Group A Beta hemolytic streptococci. Children between one and thirteen years of age seen in our pediatric emergency room or pediatric clinics with findings which indicated a throat culture had cultures performed and read in the ambulatory area. For these groups of patients, a positive culture is defined as greater than twenty percent of the colonies as Group A Beta hemolytic streptococci. No record of cultures with less than twenty percent hemolytic streptococci was maintained because of the particular

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difficulty in trying to decide between a carrier and active infection due to Group A Beta hemolytic streptococci.

Patients older than thirteen years of age who had throat cultures performed during the study period were also surveyed for comparison. These cultures were performed in the hospital bacteriology laboratory and a positive culture was defined as greater than twenty percent of the colonies as Group A Beta hemolytic streptococci. Since these were adult patients, no data for performing the cultures were obtained.

Results: During the study period, 113 throat cultures were obtained on children less than one year of age. There were no Group A Beta hemolytic streptococcal colonies identified on any cultures. The main presenting physical findings are listed in Table I. During the same period of time, the presence of Group A Beta hemolytic streptococcal pharyngitis in the community served by our institution was documented from cultures performed on children in our pediatric emergency room and pediatric clinics (Table II) and on adult in-patients and ambulatory patients (Table III).

Discussion: Our data substantiate the observation that Group A Beta streptococcal pharyngitis is uncommon during infancy. While it has been stated that a carrier rate of approximately ten percent exists in the general population, this

Table III
Results of Throat Cultures from Entire Hospital Population Processed in Hospital Bacteriology Laboratory (Patients > 13 y/o)

	<i>No. of Throat Cultures Performed</i>	<i>Positive Cultures</i>	<i>Percent Positive</i>
Nov. 15-30, 1974	126	18	14.3
Dec. 1974	198	14	7.1
Jan. 1975	250	30	12.0
Feb. 1975	272	28	10.3
Mar. 1-15, 1975	115	9	7.8

obviously does not apply to infants. The age at which a carrier state begins and the basis for the change in status are an interesting phenomenon which deserves further investigation. It has been proposed that maternal antibody might be a factor, but there is little documentation to support this hypothesis. The role of exposure may also be a factor, but while the opportunity for exposure is not the same as in a school environment of children of five to ten years of age, there is a definite exposure in the household environment. Various studies have shown the incidence of strep pharyngitis in household contacts to range from 10 to 25 percent. What part immunologic competence and the development of tonsillar tissue exert in this phenomenon is also difficult to determine since it is difficult to quantitate these factors.

Summary: Although Group A streptococcal infection was documented in the community, no positive throat cultures were obtained in the 113 tested infants with fever and/or upper respiratory infection symptoms. This supports the concept that infants with evidence of pharyngitis on physical examination with fever and upper respiratory symptoms should not be routinely treated with antibiotics. Because Group A Beta hemolytic streptococcal pharyngitis is extremely rare, the routine use of throat cultures in infants is not indicated.

Table I
Presenting Physical Findings

<i>Physical Findings</i>	<i>No. of Patients</i>	<i>Percent of Total Patients</i>
Temperature > 101° (R)	99	87.6
Infected Pharynx	95	84.1
Rhinorrhea	78	69.9
Exudate	13	11.5

Table II
Results of Throat Cultures Obtained in Pediatric Emergency Room and General Pediatric Clinics (Children): 1-13 years of age

	<i>No. of Throat Cultures Taken</i>	<i>Positive Cultures</i>	<i>Percent Positive</i>
Nov. 15-30, 1974	74	15	19
Dec. 1974	146	19	13
Jan. 1975	314	56	18
Feb. 1975	346	82	24
Mar. 1-15, 1975	127	21	16

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65 Bergen Street, Newark

Many Factors Bear on Health Care*

The drug industry is only one part of the manifold private and public activities which constitute the broad field of Health Care. Some of the important factors influencing it are:

- economy and prosperity
- politics
- spirit of the age
- demography
- laws and regulations
- morbidity
- hygiene and infrastructure (developing countries)
- science and technology, and
- the drug industry

Following are brief comments on certain of these aspects:

Economy and prosperity—Quantitative growth has been used as the classical yardstick for economic progress. If automatic increases are probably now a thing of the past, increase in quality is still a possibility.

Politics—No comments except that Winston Churchill once said: It is the task of the politician to tell the people what is going to happen and then to explain afterwards why it has not happened.

Spirit of our age—There is no doubt that we live in a materialistic age. Health is also influenced by this state of mind. Requests for welfare and nursing will increase. The community has come to regard health as a right, part of basic human rights, which should be safeguarded by the State. The health authorities will therefore fashion and enforce corresponding laws.

Laws and regulations by governmental authorities—The increasingly felt need for more security will multiply governmental controls all over the world. The legal responsibility of producers of pharmaceuticals will grow. The value of trademarks will be more and more questioned, the trend toward genuine generics will increase, and shrinking financial rewards will diminish enthusiasm for new research. As a consequence of such developments and of rising expenses, risks and burdens, it will be the philosophy of the big international enterprises to let smaller national companies participate in new discoveries and to involve them at some stage of the innovation process.

Demography—Increase in the average age in industrialized nations and increase in the younger population in developing countries, both a consequence of better hygienic conditions, are certainly facts which will influence health markets in the future.

Morbidity—This perennial condition is not likely to change much within the coming years.

Clearly, the broad field of health care is in a conflict situation in which high-sounding postulates clash with compressing limitations. The clamor attending the "right to health" accelerates simultaneously with a demand for absolute security. Is this not a somewhat contradictory state of affairs?

*Druey, J: The drug industry between miracles and oracles. *Ciba-Geigy Journal* April 1976.

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Systemic nonsuppurative necrotizing vasculitis is a term used to designate a spectrum of clinical disorders characterized histologically by widespread but segmental vascular wall inflammation, necrosis, fibrinoid deposition, and granuloma formation. Several systems of classification and nomenclature are found to be of limited use. Treatment is empiric and centers on steroid and immunosuppressive drug therapy.

The Spectrum of Systemic Vasculitis

**John L. Abruzzo, M.D.,
Philadelphia**

Kussmaul and Maier¹ are generally accredited with the first description of systemic nonsuppurative necrotizing vasculitis. Their case, evidently puzzling to them, had fever and was multisystemic. The clinical course was rapid, progressive, and terminated in death. Virchow agreed with the histologic description of perivascular inflammation with destruction of blood vessel walls and resultant aneurysmal dilatation, and acknowledged the uniqueness of the case referred to as periarteritis nodosa. Numerous reports of similar cases followed, but the material presented was often spotty and incomplete; and little insight into what was then considered a rare and fatal disorder was evident.

The English literature of the 1930's and 1940's recorded a rapidly expanding number and variety of reports of local and systemic forms of vasculitis. In the laboratory animal necrotizing vascular inflammatory lesions were observed usually in highly sensitized animals injected with foreign proteins. An association of many cases of systemic vasculitis with hypertension was noted, but aside from the relationship of the hypertension with the renal involvement little was to come of the observation. No single cause was evident for this perplexing group of disorders, but possible etiologic factors were identifiable in some. Drugs, especially the sulfonamides, penicillins, and iodides were leading prospects. Infectious agents, antigens associated with various microorganisms, and chemical toxins seemed to be appropriate underlying factors in some cases (Table 1). Allergies evidently played a role in others, but in a large number of cases no potentially causative agents were evident.

Table 1

Necrotizing Vasculitis

Factors of Possible Etiologic Importance

<i>Drugs</i>	<i>Antigens</i>
phenylbutazone	heterologous serum
penicillin	hemolytic streptococcus
iodides	HB _s Ag
griseofulvin	DNA
tetracyclines	tumor antigens?
quinine	
vaccines	<i>Chemical Toxins</i>
pertussis	chlordane
streptococcus	lindane

Classifications

Numerous classifications and systems of nomenclature have been devised and revised in an attempt to organize a growing body of reports. Perhaps the most widely known classification is that of Zeek. She classified the necrotizing angiitides into five groups:² hypersensitivity angiitis, allergic granulomatous angiitis, rheumatic arteritis, periarteritis nodosa, and temporal arteritis. In reviewing this classification, two types of pathologic reactions can be recognized: (a) granuloma formation and (b) necrotizing vascular inflammation. The size of the vessels predominantly involved and the location and distribution of the lesions also played a prominent role in the classification scheme. This classification as well as others that were devised has been helpful to clinicians, but our own observations based largely on clinical data and histology prepared from biopsy material suggest that the classification was too arbitrary and that too many cases do not seem to fit securely in any one of the five categories

*Read before the Section on Rheumatism, 210th Annual Meeting, MSNJ, June 6, 1976, Cherry Hill. Dr. Abruzzo is Professor of Medicine and Director of the Arthritis Center, Jefferson Medical College, Philadelphia.

proposed by Zeek. After reviewing the Mayo Clinic experience, Alarcón-Segovia and Brown³ proposed a different type of classification (Figure 1). The authors seem to recognize the limitations of classifications based on distinct clinical groups with well-defined histological and anatomical characteristics. Thus, the entire spectrum of disorders is appropriately placed on different points along the legs of two interposed triangles. One triangle represents granuloma

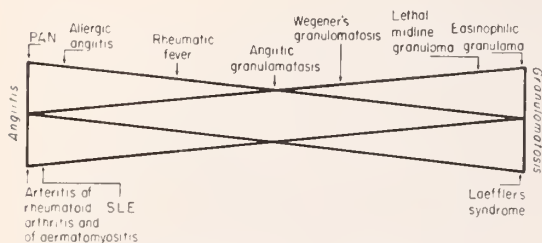


Figure 1 — A classification of necrotizing angiitides. Reproduced with permission from: *Mayo Clinic Proceedings* 39:205, 1964.

reactions and the other, necrotizing vasculitis. In addition to the idiopathic systemic vasculitis syndromes, this classification accommodates diseases such as systemic lupus erythematosus, rheumatoid arthritis, rheumatic fever, scleroderma, and so on, disorders in which systemic necrotizing vasculitis is occasionally a prominent feature. This classification has the advantage of more readily accommodating many otherwise unclassifiable cases. But classifications should serve additional functions. They should serve the clinical investigator with clues to develop testable hypotheses. In this regard, I think the various classification systems for systemic necrotizing vasculitis have not been successful.

Pathogenesis

Studies of serum sickness and immune biology in laboratory animals spearheaded by Dixon and co-workers^{4,5} and Germuth⁶ focused attention on the relationship of circulating immune complexes and serum sickness. The serum sickness syndrome is characterized histologically by nonsuppurative necrotizing vasculitis. Lesions and clinical features develop concurrently with the appearance in the circulation of immune complexes and a falling serum complement level. These latter changes reflect

deposition of antigen-antibody complexes in blood vessel walls and the resultant fixation of complement. Chemotactic and vasoactive factors generated by the process result in the characteristic inflammatory response, necrosis of vessel walls, and the deposition of fibrinoid.^{7,8}

Prompted by these and other studies investigators in many laboratories have studied sera and tissue from many clinical conditions in which vasculitis is associated. Techniques for identifying circulating immune complexes of unknown antigen composition have proliferated as the intensity of the search has increased (Table 2). The relative merits and limitations of these laboratory tools will not be reviewed, but there is now abundant evidence supporting the notion that circulating immune complexes are responsible for vasculitis in systemic lupus erythematosus, in rheumatoid arthritis, some cryoglobulinemias, and in some cases of idiopathic polyarteritis (periarteritis nodosa).

The immune complexes that appear to be responsible for vasculitis in systemic lupus erythematosus,⁹ rheumatoid arthritis,^{10,11} and mixed cryoglobulinemias¹² are composed of autologous antigens and antibodies. Immune complexes consisting of DNA and IgG have been isolated from the serum of patients with systemic lupus erythematosus and correlated with clinically active disease and especially with active renal disease. DNA, IgG, and complement components also have been eluted from renal glomeruli of cases of active lupus nephritis.⁹ The subendothelial location of

Table 2
Serum Immune Complexes
(Methods for Detection)

- (1) cryoprecipitation
- (2) analytic ultracentrifugation
- (3) agglutination of latex particles
- (4) precipitation with Clq in agarose gel
- (5) precipitation with monoclonal rheumatoid factor
- (6) precipitation with polyethylene glycol
- (7) competitive inhibition of uptake of radioactive complexes by guinea pig peritoneal macrophages
- (8) microcomplement consumption
- (9) inhibition of antibody mediated cytotoxicity
- (10) platelet aggregation
- (11) alternate appearance in circulation of antigen and antibody
- (12) radioimmune assay for immune complexes on Raji cells

immune complexes as shown by electron microscopy is compatible with deposition from the circulation through the endothelial walls of the glomerular capillary plexus.

In rheumatoid arthritis, immune complexes consisting of DNA-IgG and IgG-IgG have been identified.^{10,11} Immune complexes and complement have been identified in vascular walls in the area of clinical vasculitis.¹³ The histologic description of the vasculitis in these cases is that of a nonsuppurative necrotizing reaction. The clinical expression of the process is usually neuropathy, dermal ulcers and/or petechiae and fever, leukocytosis, eosinophilia, and frequently decreased serum levels of complement.¹⁴

Another observation of possible importance in better understanding the systemic necrotizing vasculitides was the recognition of HB_sAg (Australia antigen) in a case of polyarteritis. This observation by Gocke¹⁵ and the study of three additional cases led to the report of immune complexes composed of HB_sAg and immunoglobulin in sera of three cases. HB_sAg, IgM, and B₁C were further identified in blood vessel walls. The relationship of polyarteritis and HB_sAg has been confirmed in numerous laboratories and long-term observations on nine cases¹⁶ indicated that they were distinguishable from cases of polyarteritis lacking HB_sAg only by the presence of liver disease, which was often subclinical.

Though many questions concerning pathogenesis of the syndrome remain to be clarified, the observations carry wide implications. The data suggest that immune complexes composed of viral antigens may account for other cases of systemic and even "local" forms of necrotizing vasculitis. It is intriguing to consider these possibilities in some cases of Wegener's granulomatosis, hypersensitivity angiitis, cutaneous vasculitis, and so on. Speculation may be almost boundless, but even diseases seemingly so removed from systemic necrotizing vasculitis as measles and rickettsial infections may share common elements of pathogenesis. The possibility that the skin eruptions of these infectious disorders are due to vascular deposition of immune complexes containing antigens of infectious agents is deserving of close examination.

Treatment and Prognosis

From the above comments, it is evident that I have used the term systemic necrotizing vasculitis to designate many disorders of diverse etiology; and despite the emphasis placed in the discussion on an immune pathogenesis for some forms, there are undoubtedly multiple pathogenetic processes at play. Furthermore, like many chronic illnesses the objectives of therapy may change in accordance with stage, severity, the sites of major involvement, and complications of the disease. With due regard given to these considerations, and lacking specific therapy for systemic necrotizing vasculitis based on known causative factors, it is reasonable to question whether an objective of treatment should be to suppress immune function or to enhance it.

Two classes of drugs which have been found to be useful in these conditions are the corticosteroids and the immunosuppressives, and both have demonstrated suppressive effects on immune function. On the basis of recent reports, the immunosuppressive agent cyclophosphamide seems to be the drug of choice for the granulomatous vasculitides, especially Wegener's granulomatosis. Although steroids are frequently prescribed first, the impressive results that have been achieved with cyclophosphamide suggest that it should be used without hesitation in Wegener's granulomatosis and similar disorders.¹⁷⁻²⁰ An optimal dose schedule has not been evolved but doses that have been shown to be effective range from 25 to 150 milligrams per day. The optimal duration of therapy is also unknown, thus clinical decisions to adjust the dose or discontinue the drug must be made on the basis of individual case responses including toxicity and sensitivity to the drug.

The possible beneficial effects of the immunosuppressive drugs on the less granulomatous forms of systemic vasculitis are much less convincing, and the effectiveness of systemic steroids has been much disputed. Most observers agree that steroids at prednisone-equivalent doses of 60 to 80 milligrams per day suppress the acute and toxic manifestations of vasculitis. There is lack of agreement, however, on the question of steroid-induced acceleration of the progression of inflammatory lesions to healing

with fibrosis and resultant organ failure and/severe hypertension. Lacking clear indications and directions, it is my personal view that steroids are useful but must be used early and aggressively before the disease is fully expressed. The involvement of organs and systems with a limited capacity for regeneration such as the kidneys and central nervous system naturally conveys a poor prognosis.

Steroids seem to be especially effective in the control of the more limited types of vasculitis such as those sometimes designated hypersensitivity angiitis and especially temporal or giant cell arteritis. In these disorders 60 milligrams of prednisone (or equivalent) should be given daily until there has been unequivocal improvement assessed by both clinical and laboratory tests. The erythrocyte sedimentation rate can be used effectively to monitor the clinical response and guide the physician in tapering the drug. The occasionally advocated alternate-day regimen of steroid therapy cannot be recommended.^{21,22}

One final comment concerns plasmapheresis and thoracic duct drainage. Thoracic duct drainage is a method used to lower acutely the circulating lymphocyte pool. Presently the procedure must be considered to be purely experimental, but it is possible that the temporary physical depletion of lymphocytes may have a beneficial effect on systemic vasculitis. By contrast plasmapheresis is technically more adaptable for clinical use and lowering the circulating concentration of plasma macromolecules (including immune complexes) has conceptual value as an adjunct to other forms of therapy. Carefully controlled studies at centers having expertise with the procedures and with systemic necrotizing vasculitis are needed to further assess these potentially useful therapeutic modalities.

Summary

Systemic nonsuppurative necrotizing vasculitis is a term used to designate a spectrum of clinical disorders that are characterized histologically by widespread but segmental vascular wall inflammation, necrosis, fibrinoid deposition, and granuloma formation. Associations have been made with likely etiological factors, but in most

instances no such factors have been recognized. Several systems of classification and nomenclature have been found to be of limited use. While the pathogenesis of systemic vasculitis is poorly understood, the deposition of circulating immune complexes in vessel walls plays a significant role in some types. Careful study of such complexes may uncover important factors such as viral infections, "auto immune" phenomena, and so on and may provide a better understanding of the pathogenesis of the disease process. Treatment at this time is empiric and centers on steroid and immunosuppressive drug therapy.

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Jefferson Medical College, Philadelphia

Medical School Enrollment Shows Another Increase

Total enrollment in the 114 U.S. medical schools in 1975-1976 was 56,224, an increase of 2,170 over the previous year, says the American Medical Association's 76th annual report on medical education published in the December 27th issue of *JAMA*.

First-year enrollment increased from 14,963 in 1974-1975 to 15,351 in 1975-1976. The number of graduates increased from 12,714 to 13,561. The total number of women enrolled in 1975-1976 was 11,527, an increase of 1,741 over the previous year. Ethnic minorities enrolled in medical schools in 1975-1976 totaled 4,595, a percentage of 8.2. There were 39,330 full-time faculty members in the schools in 1975-

1976, for a ratio of one teacher for each 1.4 students. In addition, more than 70,000 physicians and others taught part time.

The enrollment of 15,351 students was selected from 42,303 applicants. For the first time in many years, the number of applicants declined slightly, from the peak of 42,624 in 1974-1975. Each applicant applied to an average of nine schools at the same time, hoping for acceptance by at least one.

By 1980, the 114 medical schools projected a first-year class of more than 16,000 with 15,500 graduates each year, and additional medical schools will be in operation by that time.



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Mailgram 2

THERE ARE A LOT OF PEOPLE GETTING BETWEEN YOU AND YOUR PATIENT.

Medicine today is in the spotlight, subjected to all kinds of scrutiny. Your control over patient therapy is being monitored, judged and occasionally abrogated, sometimes by unknown third parties.

The worry is that in the wake of this focus, the relationship between you and your patient will be weakened, without offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your non-generic prescriptions be filled with the precise products you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original NDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is a Federal regulation designed to cut the Government's drug bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only for the cost of the lowest-priced, purportedly-equivalent,

generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than \$1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

It could make a difference in your practice tomorrow.



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After almost a decade since the recognition of the ARD syndrome as an important cause of acute respiratory failure, its pathogenesis remains poorly understood. A combination of factors or causes, which have not yet been identified, acts to increase capillary permeability in the lung. Usually hydrostatic and oncotic pressures within the lung are normal, unless they have been altered as part of therapy. Increased interstitial water, the hallmark of this disease, results in small, stiff lungs with marked impairment of oxygen transport. Treatment with positive end-expiratory pressure ventilation and proper use of oxygen usually is sufficient to support the patient until the lung repairs itself.

The Pathogenesis of the Adult Respiratory Distress Syndrome

David J. Riley, M.D., Piscataway*

Acute respiratory failure develops as a result of two general types of altered lung function. The first is due to severe airflow obstruction as occurs in diseases such as asthma and chronic obstructive lung disease. The second category, which is less often seen in clinical practice, results from a disorder of the peripheral unit of the lung (the alveolus, the capillary, and the interstitium). This type of disorder is commonly referred to as the adult respiratory distress (ARD) syndrome, and its clinical picture, pathogenesis, and treatment are quite different from respiratory failure caused by impaired airflow.

The Clinical Syndrome

The adult respiratory distress syndrome has a characteristic clinical picture and may be associated with a variety of medical and surgical diseases, some of which are listed in the table. The cardinal features of the ARD syndrome are rapidly progressive respiratory distress, severe hypoxia, and widespread infiltrates on the chest roentgenogram. The disorder commonly occurs in persons with previously healthy lungs, frequently following injuries or in association with severe medical illnesses. Pathologically, the lungs are congested and atelectatic. Physiologically, the lungs are stiff and small, and oxygen exchange is decreased due to a large amount of blood which is shunted past poorly ventilated or collapsed lung units. All of these features have been described in detail in several articles and monographs,¹⁻³ and will not be dis-

cussed in detail; instead, this paper will focus on the pathogenesis of the ARD syndrome.

Since a variety of disorders may be associated with the ARD syndrome, this suggests that the lung reacts to injury in a stereotyped way. In this regard, the ARD syndrome is analogous to acute tubular necrosis: infections, toxic exposures, or vascular insults lead to temporary loss of organ function. If the patient survives, function is usually fully restored. In terms of treatment, there is usually little we can do to speed recovery and therapy is mostly supportive.

Since an increase in lung interstitial water is the common pathologic feature of this disorder, a good place to begin understanding the pathogenesis is a brief review of how fluid moves within the lung.

Lung Fluid Movement

The peripheral lung unit can be thought to consist of three functional units: the alveolar space, the capillary space, and the interstitium (Figure 1). The interstitium, located between the air- and blood-containing spaces, is normally thin and contains a few loose connective tissue cells and lymphatics. Separating the interstitium and alveolus is the alveolar epithelium which has "tight" junctions between cells; this makes the

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Physical Factors Controlling Lung Water

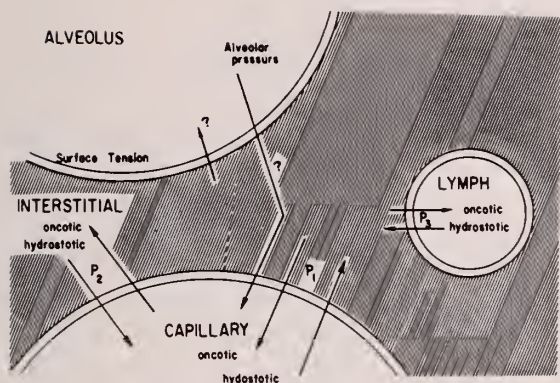


Figure 1—Physical factors controlling the movement of water among lung compartments. Water movement is determined by the hydrostatic and oncotic pressure gradients; alveolar pressure and surface tension play a minor role in fluid movement.

movement of fluid into the alveolus relatively difficult. The capillary endothelium, on the other hand, has “loose” junctions between cells and water molecules can move more freely across it. The lung lymphatics are of great importance in maintaining efficient gas exchange across the lung because they remove any excess fluid which leaks into the interstitial space. Thus, there are three important structures in the peripheral lung unit which influence water movement: the alveolar epithelium, the capillary endothelium, and the pulmonary lymphatics.

Staub¹ recently has emphasized the role of the lung lymphatics in maintaining fluid homeostasis in the lung. Using an animal model in which the lymph flow from the lungs could be measured, he estimated that the lymphatics drain 25 to 30 cc/hour from the human lung; this flow may be increased to 200 cc/hour in pulmonary edema. This is of great importance in preventing a build-up of fluid, but there is a limit to the amount of fluid that can be removed in this way. If that limit is exceeded, a considerable amount of edema fluid—perhaps 500 cc—can be held in the interstitial compartment before “overflow” occurs into the vitally important air-containing spaces⁵. The important defenses in keeping the alveoli dry are pulmonary lymph flow and the “sponge-like” effect of the interstitial space.

Up to this point we have considered only the structural integrity of the peripheral lung unit. The physical forces controlling the movement of water across these structures are equally as important. Water molecules are freely diffusible across the lung and merely follow passively the differences in pressure gradients between compartments. Pressure gradients are produced by differences in hydrostatic forces and oncotic forces between spaces. For simplicity, we will consider only how these forces act across the capillary endothelium, as illustrated in Figure 1.

Hydrostatic pressure, in general, causes fluid to move out of a compartment and oncotic pressure tends to draw fluid into a compartment. The lung interstitium, however, is thought to have a negative hydrostatic pressure, probably due to the mechanical properties of the lungs or the lung elastic recoil pressure. Guyton⁶ has estimated the pressure differences across the pulmonary capillary endothelium to be as follows:

Factors forcing fluid into interstitium:

Capillary hydrostatic pressure	7.0 mmHg
Interstitial oncotic pressure	4.5 mmHg
(Negative) Interstitial hydrostatic pressure	17.0 mmHg
Total forces	28.5 mmHg

Factors forcing fluid into capillaries

Capillary oncotic pressure	28.0 mmHg
Total forces	28.0 mmHg
Net movement of fluid=28.5-28.0 mm Hg=0.5 mm Hg forcing fluid into interstitium	

There thus is a small movement of fluid from the capillary space to the interstitium, and the excess fluid is removed by the lung lymphatics.

To summarize, the factors which are important in controlling the movement of water across the capillary endothelium are the integrity of the capillary wall and the net effect of physical forces acting across the wall. This relationship can be summarized in the form of the well-known Starling equation of fluid movement. This equation states:

$$\text{Net fluid movement} = \text{Membrane permeability} \times [(\text{Difference in hydrostatic pressure}) - (\text{Difference in oncotic pressure})]$$

This relationship implies that in pathological states, pulmonary edema may be caused by two separate mechanisms: increased permeability of the pulmonary capillaries or an imbalance of forces acting across the membrane. The latter form of pulmonary edema is the familiar "cardiogenic" pulmonary edema; increased leakiness of the endothelium leads to the "non-cardiogenic" form, and the adult respiratory distress syndrome is considered to be of this type. Both altered permeability and unbalanced pressures may occur simultaneously and it sometimes requires special techniques (i.e., measuring pulmonary artery pressure) to determine which is predominant in a particular patient.

With this background, we now turn to the ways in which capillary permeability may be increased in the ARD syndrome.

Pathogenic Factors in the ARD Syndrome

A scheme of the pathogenesis of the ARD syndrome is presented in Figure 2. At the top are listed several of the important causes of the syndrome. None of these factors alone can cause the syndrome, but it is likely that a combination of these factors leads to change in the integrity of the capillary endothelium. Once the primary insult has occurred, there may be iatrogenic factors (i.e., fluid overload) which may alter the outcome unfavorably. The excess interstitial fluid impairs gas exchange and alters the mechanical properties of the lung, leading to the typical clinical picture.

Shock was first thought to be the cause of this disorder since the syndrome was recognized initially in battlefield casualties. Hypotension cannot be the sole cause of the disorder because the syndrome occurs in patients who remain normotensive; it cannot be reproduced in laboratory animals by producing brief oligemic shock⁷. In some patients with infection, sepsis may be important since endotoxin, a vasoconstricting bacterial product, increases capillary permeability⁸; however, overwhelming infection occurs only in a minority of patients with the ARD syndrome. Hypoxia also was thought to be a provoking factor because interstitial pulmonary edema can be produced by travel to

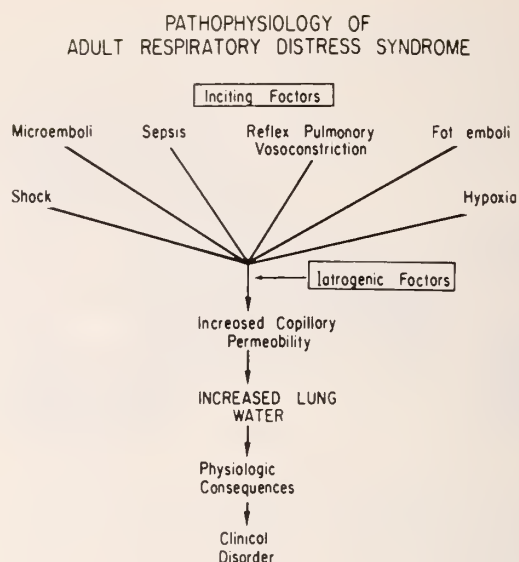


Figure 2—Scheme showing the pathophysiology of the ARD syndrome indicating how inciting factors increase permeability and iatrogenic factors may worsen the situation. Increased lung water alters lung physiology and leads to the typical clinical picture.

high altitudes, presumably due to low-oxygen tensions. Now it is thought that hypoxia alone cannot account for the syndrome.

The most commonly invoked explanation of this disorder is that microemboli damage the lung in the setting of a sluggish pulmonary circulation.^{9,10} Emboli arise from the deep veins of the legs and travel to the lungs several days after the patient has been put to bed following the initial insult. Fat emboli and necrotic tissue emboli may be important if traumatic injury has taken place. Aggregates of platelets are thought to damage the capillary endothelium directly by increasing permeability through the release of humoral substances such as serotonin, histamine, and bradykinin. In addition, microemboli may activate intravascular coagulation, and fibrin and fibrin-split products may directly damage the endothelium¹¹. However, the embolic theory is not fully accepted because emboli are not always found in the lungs of patients who die of this disorder, and intravascular coagulation is not frequently documented. In view of this, most authorities do not recommend anticoagulant treatment as a routine in these patients¹².

When this disorder was first encountered during the Vietnam War, it was thought to be a consequence of too vigorous hydration. However, evaluation of large series of patients has shown that there is little correlation between the amount of fluid infused and the risk of developing the ARD syndrome¹³. Massive infusions of stored blood products were also thought to worsen the disorder since this type of blood contains microemboli; however, the disease cannot be prevented by using carefully filtered blood. Prolonged exposure to high concentrations of oxygen may have contributed to some cases at a time when the dangers of excessive oxygen were less well recognized than they are now. Lastly, the role of the infusion of high concentrations of serum albumin and other colloids in worsening the disorder remains controversial. The rationale for using albumin is to raise serum osmotic pressure and draw fluid from the interstitium. But in the presence of a leaky capillary endothelium, albumin itself passes into the interstitium and worsens the situation by raising interstitial osmotic pressure. The question of the proper role of albumin is unresolved, but most authorities believe that albumin should be given if the serum albumin is low, but to overcorrect may be harmful¹².

In summary, the cause of the ARD syndrome is unknown. There probably are several factors which act in combination through a common final pathway to increase pulmonary capillary permeability. Once the initial insult has occurred, certain iatrogenic factors may worsen the disease process; with proper patient management, these are unlikely to contribute to the disorder.

Changes in Pulmonary Function and Gas Exchange

The altered pulmonary physiology is better understood than are the basic causes of the ARD syndrome. A scheme for understanding the altered lung function is presented in Figure 3. On the right are shown the mechanisms leading to the altered mechanical properties of the lung. The accumulation of interstitial lung water leads to a stiff, small lung and the patient favors a rapid, shallow breathing pattern. When

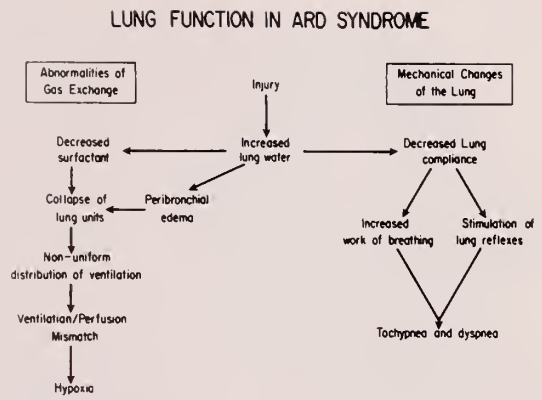


Figure 3—Scheme showing how gas exchange and lung mechanics are altered in the ARD syndrome.

pulmonary function is tested, a low vital capacity with normal expiratory flow rates is found. The work required to expand the stiff lung is increased; in addition, fluid stimulates certain free nerve endings in the interstitium. The combination of this reflex plus the increased work of breathing accounts for the sensation of dyspnea. Thus, the clinical picture produced is one of tachypnea and air-hunger.

Impairment of gas exchange results from the collapse of lung units and the shunting of blood past these units, and the sequence of events leading to this is shown on the left in Figure 3. Collapse occurs for two reasons. First, as interstitial fluid accumulates, it surrounds the alveoli and terminal bronchioles; this peribronchial edema reduces the distending pressure across the airway and produces airway narrowing. Some airways are narrowed more than others and therefore ventilation is distributed unevenly to the lung units. Pulmonary blood flow, on the other hand, tends to be better preserved, and the result is a mismatching of ventilation to perfusion causing hypoxia.

A second reason for alveolar collapse has to do with loss of surfactant. This substance, a lipid which lowers the surface tension of the alveolar spaces and thereby prevents collapse, is produced by the alveolar lining cells. As interstitial fluid collects, it interferes with the production of surfactant causing microatelectasis. The consequence is that blood passes by these collapsed units without gas exchange occurring;

this is called an anatomic shunt. The hypoxia produced cannot be corrected easily by giving the patient pure oxygen to breathe since the unshunted blood can pick up only relatively little additional oxygen, and the shunted blood picks up none at all. This situation—severe hypoxia and cyanosis which improve little after oxygen administration—is a hallmark of advanced ARD syndrome.

One method which improves gas exchange is the use of positive end expiratory pressure (PEEP), a method of ventilation which applies positive pressure to the collapsed lung units during expiration as well as inspiration. The result of this continuous distending pressure to the airways is that lung units previously closed become ventilated, and secondarily the magnitude of the vascular shunt decreases and oxygen tension rises. The use of PEEP is not without hazards since the positive pressure is transmitted to the pulmonary vessels as well, and this may reduce venous return and thereby cause a fall in cardiac output. If this happens, a fall in systemic oxygen delivery may result despite the rise in

blood oxygen tension. Excessive levels of PEEP are best avoided.

Although oxygen transfer across the lung is the major blood gas abnormality, carbon dioxide retention may occur in the terminal phase of the illness due to a combination of severe ventilation/perfusion mismatching or exhaustion. Usually, carbon dioxide tensions are normal or are frequently low due to hyperventilation.

Table
Disorders Associated with the ARD Syndrome

<i>Infections:</i>	<i>Aspiration:</i>
viral pneumonia	gastric acid
bacterial pneumonia	drowning
overwhelming sepsis	<i>Drug overdose:</i>
<i>Trauma:</i>	heroin
nonthoracic trauma	methadone
fat emboli	barbiturates
CNS injury	<i>Miscellaneous:</i>
<i>Shock of any etiology</i>	acute pancreatitis
<i>Inhalation of toxic gases:</i>	uremia
various chemicals	postcardiopulmonary
smoke	by pass
hyperoxia	eclampsia
	acute radiation therapy

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* **WRITE FOR REPRINT:** R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioğlu, M.D. Hormones for Improved Sexuality in the Male and Female Climacteric. *Drug Therapy*, Sept. 1976.

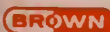
Is there a true aphrodisiac? How effective are androgens in the management of the male climacteric and male impotence? Article discusses the psychophysiological and hormonal changes in the elderly male and female and therapeutic considerations. The effectiveness of methyltestosterone in the management of male impotence was confirmed by a cross-over, double-blind study using a placebo and Android-25

(methyltestosterone 25 mg.), on 20 males, 50 years of age or older who complained of secondary impotence. Patients received a series of placebo then Android-25, or Android-25 then placebo as follows: 1 tablet/30 days, 2 tablets/30 days, 3 tablets/30 days. Sexual response was evaluated: 0 = no change; + = 25% improvement; ++ = 50% improvement; +++ = 75% improvement. Placebo effectiveness was + or ++ in 12.7% of trials. Android-25 elicited a +, ++ or +++ response in 47.2% of trials. There was often a dose related response not observed with the placebo. This effect was not observed in younger patients (age 28-45 years).

DESCRIPTION: Methyltestosterone is 17 β -Hydroxy-17-Methylandroster-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunuchism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgen deficiency. 4. Post-pubertal cryptorchidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric,

avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE**

REACTIONS: Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. In the male: Eunuchoidism and eunuchism, 10 to 40 mg. Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpubertal cryptorchidism, 30 mg. **REFERENCE:** Robert B. Greenblatt, M.D., and D. H. Perez, M.D.: 'The Menopausal Syndrome. Problems of Libido in the Elderly', pp. 95-101 Medcom Press, N.Y., 1974. **HOW SUPPLIED** 5, 10, 25 mg. in bottles of 60. 250. Rx only.



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The responses on the questionnaire course entitled "Controversies in the Management of Abdominal Sepsis" are reported. A unique feature of this most recently conducted questionnaire course is the combined assessment of three major groups of specialists: general surgeons, gynecologists, and general surgeons who include gynecology as a significant part of their practice. Some salient aspects of this course are presented.

Controversies in the Management of Abdominal Sepsis:

A Questionnaire Course*

Eric J. Lazaro, M.D., B. F. Rush, Jr., M.D., and Jerome Dolan, M.D., Newark*

In previous communications^{1,2} we have outlined the salient features of the questionnaire course as an exercise in continuing medical education. The purpose of this paper is to report the responses to the course on "Controversies in the Management of Abdominal Sepsis" that was conducted at the annual meeting of The Medical Society of New Jersey in June 1976. A unique feature of this course on abdominal sepsis was that it was co-sponsored by the Section on Surgery and the Section on Gynecology and Obstetrics. This made it possible to compare the types of practice of three major subgroups: (1) general surgeons whose practice includes little or no gynecology; (2) gynecologists who restrict their practice to their specialty; and (3) general surgeons whose practice includes a significant amount of gynecological surgery.

There were 180 respondents to the questionnaire, 73 (41 percent) were general surgeons; 41 (23 percent) were gynecologists; and 58 (32 percent) were general surgeons with interest in gynecology. The remaining 8 (4 percent) represent other types of specialty practice.

The answers of the 180 respondents, general surgeons (S), gynecologists (G), and general surgeons with an interest in gynecology (G/S), to the questionnaire on "Controversies in the Management of Abdominal Sepsis" are contained in the following tabulation.

Questions	Preferred Answers of Respondents [%]		
	S	G	S/G
1. In preparing a patient for elective colonic surgery your regimen includes			
(1) mechanical cleansing of the colon and administration of antibiotics parenterally	3	2	4
(2) mechanical cleansing of the colon and administration of antibiotics orally	72	44	82
(3) mechanical cleansing of the colon and administration of antibiotics parenterally and orally	24	5	9
(4) mechanical cleansing of the colon only	1	5	5
(5) a regimen not listed above, or no opinion	0	44	0
2. Radical surgical debridement for advanced generalized peritonitis has been advocated by a few surgeons in the past. Your experience with this surgical approach is best summarized by which of the following statements?			
(1) No experience	67	76	52
(2) Minimal experience, mostly unsuccessful	7	0	23
(3) Some experience, mostly successful	19	14	16
(4) Moderate or considerable experience which is largely successful	7	5	5
(5) Other or no opinion	0	5	4
3. Following removal of a gangrenous appendix in a woman at term who demonstrates no cephalopelvic disproportion you prefer to			

*Presented in part before the joint meeting of the Sections on Obstetrics-Gynecology and Surgery, 210th Annual Meeting of The Medical Society of New Jersey, Cherry Hill, New Jersey, June 7, 1976. Dr. Lazaro is Professor of Surgery; Dr. Rush is Johnson and Johnson Professor and Chairman, Department of Surgery; and Dr. Dolan is Clinical Professor of Obstetrics and Gynecology, CMDNJ, New Jersey Medical School, Newark.

- | | | | | | | | | | | |
|--|----|-----|----|--|--|--|--|----|----|----|
| (1) close the abdomen and permit labor to take its normal course | 85 | 100 | 78 | | | | You are most likely to drain this abscess | | | |
| (2) close the abdomen and induce labor soon after | 7 | 0 | 6 | | | | (1) transperitoneally through an incision in the anterior abdominal wall | 10 | 12 | 13 |
| (3) perform a cesarean section | 0 | 0 | 0 | | | | (2) extra-peritoneally through an incision in the anterior abdominal wall | 4 | 12 | 6 |
| (4) do a cesarean hysterectomy | 1 | 0 | 0 | | | | (3) transrectally through an incision in the anterior rectal wall | 82 | 19 | 63 |
| (5) adopt another option, or you have no opinion | 7 | 0 | 16 | | | | (4) by transcutaneous needle aspiration | 0 | 0 | 0 |
| 4. In your practice you have more frequently drained subphrenic abscesses by which of the following approaches? | | | | | | | (5) by some other approach, or you have no opinion | 4 | 57 | 18 |
| (1) Posteriorly and extraperitoneally through the bed of the last rib | 8 | 5 | 9 | | | | 9. In patients with generalized peritonitis and in whom the primary cause has been surgically treated you prefer at the time of laparotomy to irrigate the peritoneal cavity | | | |
| (2) Anterior, subcostal and extraperitoneal | 13 | 2 | 7 | | | | (1) never | 3 | 26 | 23 |
| (3) Anterior, transperitoneal | 28 | 7 | 38 | | | | (2) with copious amounts (over 6 liters) of normal saline | 47 | 17 | 32 |
| (4) Extraperitoneal, but either anterior or posterior depending on the location of the abscess | 49 | 7 | 39 | | | | (3) with an antibiotic solution | 28 | 19 | 27 |
| (5) Another approach or no opinion | 2 | 49 | 7 | | | | (4) with a relatively small amount (less than 2 liters) of normal saline | 22 | 17 | 16 |
| 5. Gallium citrate (Ga ⁶⁷) imaging has been recommended for the localization of intra-abdominal abscesses. With this diagnostic modality | | | | | | | (5) by another method or you have no opinion | 0 | 21 | 2 |
| (1) you have no experience | 29 | 76 | 39 | | | | 10. In patients with contamination of the peritoneal cavity with colonic contents, irrigation of the peritoneal cavity with antibiotic solution has been recommended to prevent the development of peritonitis. Which of the following statements summarizes your attitude toward this therapeutic approach? | | | |
| (2) you are willing to try it | 29 | 12 | 18 | | | | (1) Believe that it has some merit but have not yet tried it | 17 | 31 | 14 |
| (3) you have previously employed it for tumor diagnosis but not for abdominal sepsis | 7 | 0 | 7 | | | | (2) Have tried it previously but abandoned it because of its ineffectiveness | 17 | 4 | 16 |
| (4) you have employed it successfully in the diagnosis of abdominal abscesses | 30 | 7 | 29 | | | | (3) Do not believe that it has any merit and have therefore never employed it | 6 | 17 | 27 |
| (5) you have another or no opinion | 5 | 5 | 7 | | | | (4) Employ it frequently and believe that it is definitely efficacious | 52 | 24 | 36 |
| 6. In patients undergoing elective abdominal hysterectomy for uterine fibroids you prefer to administer antibiotics | | | | | | | (5) Other or no opinion | 8 | 24 | 7 |
| (1) routinely | 1 | 2 | 7 | | | | 11. In the management of a patient with severe abdominal sepsis your experience with the use of hyperalimentation is summarized by which of the following statements? | | | |
| (2) frequently but not always | 1 | 0 | 13 | | | | (1) You have employed it with some or considerable success | 68 | 7 | 61 |
| (3) in selected cases that are infection prone (e.g., the compromised host) | 11 | 26 | 29 | | | | (2) You have employed it with little or no success | 10 | 2 | 9 |
| (4) only when evidence of infection develops | 56 | 72 | 61 | | | | (3) You are not reluctant to employ it but have not previously done so | 18 | 31 | 27 |
| (5) for other reasons, or you have no opinion | 31 | 0 | 0 | | | | (4) You are reluctant to try it | 3 | 5 | 2 |
| 7. Following colonic anastomosis the factor you consider of least importance in the development of leakage at the anastomotic site is | | | | | | | (5) You have another or no opinion | 1 | 55 | 1 |
| (1) adequate blood supply | 1 | 2 | 3 | | | | 12. Following appendectomy for suppurative appendicitis with a periappendicular abscess the abscess cavity is drained. Your | | | |
| (2) age of the patient | 81 | 32 | 68 | | | | | | | |
| (3) preoperative irradiation | 6 | 0 | 5 | | | | | | | |
| (4) the nature of the primary disease for which the operation was performed | 11 | 2 | 13 | | | | | | | |
| (5) some other factor, or you have no opinion | 1 | 64 | 11 | | | | | | | |
| 8. A 30-year-old female develops a pelvic abscess one week post-appendectomy. The abscess can be felt as a warm, tender, fluctuant mass on rectal examination. | | | | | | | | | | |

regimen for removal of the drain(s) is				(1) routinely or frequently employ it	6	5	1
(1) completely a day or two after purulent drainage has ceased	14	21	27	(2) have employed it in the past but have now abandoned it	1	5	0
(2) by commencing on the first postoperative day and a little at a time thereafter	20	41	27	(3) have never employed it	21	76	80
(3) at one time in about a week whether or not drainage has ceased	7	2	11	(4) employ it only in cases that you feel carry an increased risk of morbidity	24	12	13
(4) commencing in about one week postoperatively and a little at a time thereafter	50	10	35	(5) have another or no opinion	48	2	6
(5) according to some other regimen, or no opinion	9	26	0	18. In patients with severe abdominal sepsis it is your conviction that the administration of adrenal steroids			
13. Following elective cholecystectomy and exploration of the common duct for chronic cholecystitis and choledocholithiasis the peritoneal cavity is drained. If drainage is minimal postoperatively you prefer to remove the drains				(1) has a definite place in the therapy in the majority of cases	17	14	8
(1) after about a week	37	0	30	(2) has no place in the therapy unless evidence of adrenocortical deficiency is present	36	31	29
(2) after 24 to 48 hours	25	7	13	(3) may play a role in selected cases	40	50	63
(3) starting on the first or second day and a little at a time thereafter	23	17	32	(4) are employed by you although you do not believe in their efficacy	3	0	0
(4) within 24 hours after the drainage has ceased	6	5	16	(5) is for other reason(s), or you have no opinion	4	5	0
(5) by another regimen, or no opinion	9	71	9	19. In the majority of cases of suppurative appendicitis with abscess formation you prefer to perform an appendectomy, evacuate the pus and necrotic debris, and			
14. In your experience, the overall mortality in surgically treated patients above the age of 60 years with generalized fecal peritonitis resulting from perforated diverticulitis is				(1) drain both the peritoneal cavity and the abdominal wound	68	45	86
(1) less than 5 per cent	15	0	27	(2) drain the peritoneal cavity only	11	17	7
(2) 5 to 15 per cent	29	5	27	(3) drain the wound only with or without primary closure	11	5	2
(3) 15 to 30 per cent	25	10	18	(4) employ no drainage with or without delayed closure of the wound	4	2	4
(4) over 30 per cent	21	7	15	(5) have other or no opinion	6	31	1
(5) no opinion	10	78	13	20. Late deaths from peritonitis are at least partly attributable to gastrointestinal malfunction and protein malnutrition. Which of the following therapeutic modalities concerning this syndrome of proteolysis and decreased protein synthesis is incorrect?			
15. Following splenectomy for a ruptured spleen you prefer to drain the peritoneal cavity				(1) A defined diet in the presence of a functioning intestine	7	2	7
(1) always or almost always	22	2	34	(2) Intravenous amino acids (protein sparing therapy) if the patient has adequate fat caloric stores	7	0	5
(2) sometimes	18	0	21	(3) Hyperalimentation in the presence of protein caloric malnutrition and no gastrointestinal function	15	17	25
(3) almost never or never	46	15	36	(4) Fat suspension for all situations	65	33	55
(4) not any more although you did so in the past	14	2	9	(5) Other or no opinion	6	48	8
(5) no opinion	0	81	0	21. The usual circulatory pattern leading to recovery from major sepsis is high cardiac output and reduced peripheral vascular resistance. Which of the following is the <i>least</i> likely cause for inability of the circulation to meet these demands?			
16. The type of drain you prefer to employ for drainage of the peritoneal cavity is							
(1) penrose drain	47	60	59				
(2) cigarette drain (penrose drain with a gauze wick)	7	7	7				
(3) a sump type of drain	39	21	29				
(4) a type of drain not mentioned above	6	0	5				
(5) no opinion	1	12	0				
17. Suction drainage as an alternative to prophylactic antibiotics for hysterectomy has been proposed to decrease the risk of infection of the vaginal cuff and the retroperitoneal pelvic tissues. Your attitude to suction drainage is that you							

- | | | | |
|---|----|----|----|
| (1) Myocardial depression | 11 | 10 | 15 |
| (2) Malnutrition | 44 | 38 | 44 |
| (3) Hypovolemia | 8 | 7 | 12 |
| (4) Elevated pulmonary vascular resistance with right heart failure | 22 | 21 | 15 |
| (5) Another cause or no opinion | 15 | 24 | 14 |
22. Which of the following is the *least* important therapeutic measure for septic shock?
- | | | | |
|---|----|----|----|
| (1) Restoration of circulating blood volume | 3 | 5 | 3 |
| (2) Diuresis | 56 | 57 | 63 |
| (3) Respiratory support | 3 | 14 | 7 |
| (4) Corticosteroids | 31 | 14 | 14 |
| (5) Another measure or you have no opinion | 7 | 10 | 13 |
23. The least significant measure in prevention or treatment of "adult respiratory distress syndrome" and subsequent bronchopneumonia is
- | | | | |
|---|----|----|----|
| (1) maintenance of high cardiac output | 38 | 2 | 26 |
| (2) respiratory support | 6 | 5 | 8 |
| (3) diuretics and increase of plasma oncotic pressure | 32 | 38 | 32 |
| (4) elimination of septic or gangrenous parts | 6 | 17 | 15 |
| (5) another measure or no opinion | 18 | 38 | 19 |
24. If prophylactic systemic antibiotics are to be employed in an elective sigmoid resection for a small malignant lesion you would preferably commence them
- | | | | |
|--------------------------------|----|----|----|
| (1) the night before operation | 39 | 41 | 46 |
| (2) the morning of operation | 50 | 14 | 36 |
| (3) during operation | 4 | 0 | 9 |
| (4) after operation | 1 | 0 | 9 |
| (5) other or no opinion | 6 | 45 | 0 |

Comment

A unique feature of this questionnaire course on abdominal sepsis was that it was a combined endeavor of two surgically oriented groups of The Medical Society of New Jersey, the Section on General Surgery and the Section on Gynecology and Obstetrics. In this respect it differed from the questionnaire courses that were held in previous years. Some questions in the above questionnaire are of interest both to general surgeons and to gynecologists, while certain questions are virtually applicable to only one of these groups. Of particular interest are the general surgeons who are basically trained in general surgery but whose practice includes a significant amount of gynecology. This group has been afforded the opportunity to compare their

professional attitudes to gynecological problems with those of their gynecological colleagues. This innovation of combining two or more surgical specialties will be considered in the planning of future questionnaire courses.

For each questionnaire course the committee generally selects questions that relate to issues of a controversial nature, that involve recent advances in clinical practice, and that are of vital importance in the area of the topic being discussed. The questionnaire is not intended to be an examination in the conventional sense with a single correct answer to each question. Instead, it aims at obtaining information pertaining to the current consensus of practice by specialists engaged in similar types of professional work. In certain items two (rarely more) preferences may be considered acceptable according to existing standards of practice in the country. It should be emphasized that the results of each questionnaire provide valuable documentation of professional attitudes of the practicing community and could possibly be cited in support of medico-legal decisions. Since there is no mechanism for identifying the respondents, their anonymity is always maintained.

Finally, a questionnaire may be repeated after a lapse of some years. This would provide the opportunity to observe changes that have taken place in the management of various clinical states, and to measure the attitudes of practicing physicians to keeping abreast of medical progress. Two important examples of topics that lend themselves to such repetition are peptic ulcer disease and cancer of the breast. The latter has been chosen by the respondents of this last questionnaire course to be the topic for the next course to be held in June 1977.

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CASE REPORTS

Eosinophilic granuloma of bone is a benign histiocytic process of unknown etiology. The radiographic features of eosinophilic granuloma are well described, but there are few specific references to the bone imaging features in the medical literature. A patient is presented who demonstrated the typical "button sequestrum" of the skull, with focal areas of bone destruction in the frontal and posterior parietal regions. A bone imaging study was performed with ^{99m}Tc Technetium polyphosphate. The scan revealed increased uptake within the skull and right rib cage, corresponding to areas of bone destruction on plain film radiographs of these areas. The lesions of the skull were treated with radiation, and the patient was completely asymptomatic six months after therapy.

Positive ^{99m}Tc Technetium Polyphosphate Bone Scan in Eosinophilic Granuloma

Edwin S. Wilson, M.D., Mount Holly*

Eosinophilic granuloma of bone is a benign inflammatory histiocytosis of unknown etiology. The process may involve virtually any portion of the skeleton, and has also been reported in lung and gastrointestinal tract.^{1, 2} The term "eosinophilic granuloma" was introduced in 1940 by Jaffe and Lichtenstein in their description of a patient with a solitary lesion of the femur.³ In 1942, Green and Farber reported ten patients with eosinophilic granuloma of bone.⁴ These authors felt that eosinophilic granuloma was just one part of a spectrum of diseases which also included Hand-Schüller-Christian and Letterer-Siwe disease. In 1953, Lichtenstein accepted this concept and coined the term "Histiocytosis X" to describe the clinical triad of disease processes.⁵ Eosinophilic granuloma seems to be the more benign process which involves predominantly the skeletal system, although diffuse osseous infiltration has been reported.⁶

The plain film radiographic features of eosinophilic granuloma have been described well. However, references to the bone imaging findings in patients with eosinophilic granuloma are sparse, even in the standard textbooks of nuclear medicine.^{7, 8} A search of the literature reveals a similar lack of specific references to the scan findings in patients with eosinophilic granuloma of bone.^{9, 10}

This paper relates our experience in a young patient with histologically proven eosinophilic

granuloma, in whom a positive bone scan was obtained during the course of his hospitalization. The scan was not only interesting, but also provided added information which facilitated the diagnosis and subsequent therapy in this patient.

Case Report

A 22-year-old male was admitted to the hospital with a two-month history of a tender swelling of the left fronto-parietal region of the skull. He denied previous trauma. There was no significant past medical history. Physical examination revealed a tender mass of the left fronto-parietal region which measured approximately 1.5 centimeters. There was no regional lymphadenopathy. The remainder of the physical examination was normal.

Laboratory studies were within normal limits. Plain radiographs of the skull demonstrated the presence of a sharply margined, radiolucent lesion within the left fronto-parietal region (Figure 1). The defect contained a faint sequestrum. A smaller radiolucent defect was noted in the left posterior parietal region. Bone imaging study was performed with ^{99m}Tc Technetium polyphosphate. The bone scan revealed two areas of increased uptake of radionuclide within areas corresponding to the lytic lesions of the bony vault (Figure 2). An area of increased uptake was also defined within the right upper thorax (Figure 3). Plain films of the thorax demonstrated a poorly-defined area of osteolysis within the right fourth rib.

Excisional biopsy of the right fourth rib was performed. The undersurface of the rib was replaced by a tan mass of tissue, which on histologic section presented a histiocytic infiltration with aggregates of eosinophils, lymphocytes, and plasma cells. The final diagnosis was eosinophilic granuloma.

*From the Department of Radiology, Burlington County Memorial Hospital, Mount Holly, New Jersey, where Dr. Wilson is a member of that department.



Figure 1 — Plain lateral radiograph of the skull demonstrates two destructive lesions of the vault. The anterior lesion contains a button sequestrum.

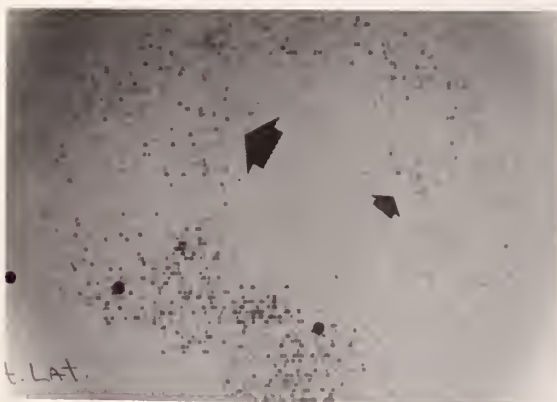


Figure 2 — Lateral scan image of the skull reveals increased uptake of radionuclide in areas corresponding to the lytic lesions (arrows).

The patient was given radiation therapy: a total of 1,000 rads was administered to the skull lesions. Excisional biopsy of the right fourth rib was considered curative. The patient was asymptomatic six months after treatment.

Discussion

Eosinophilic granuloma is a benign histiocytic inflammatory process which may affect virtually any bone within the body. Although the disease is of unknown etiology, some features of the disease have suggested viral infection and autoimmune process to several investigators.¹¹

Eosinophilic granuloma of bone is typically a disease of young patients. In their series of 106 patients with eosinophilic granuloma, Schajowicz and Slullitel found that 62 percent occurred between the ages of one and fifteen years and most cases occurred in male patients.¹¹ Pain

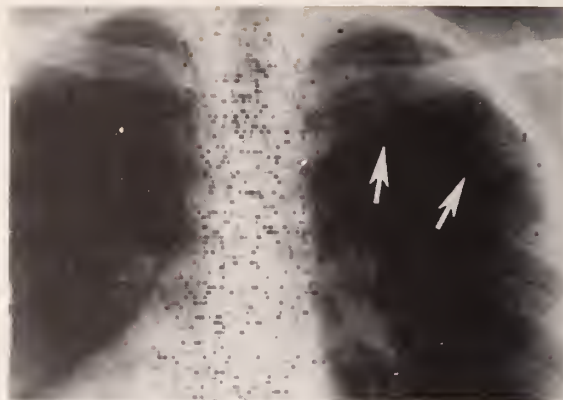


Figure 3 — Superimposed scan and plain film of the chest reveals abnormal uptake over the fourth rib (arrows).

and palpable mass are the most common presenting features.

Eosinophilic granuloma characteristically produces a localized area of bone destruction, with little or no accompanying reaction about the lesion. The lesion begins within the medullary space, but may produce cortical destruction and pathologic fracture.

Pathologically, the lesions of eosinophilic granuloma present sheets of lightly staining histiocytes, together with varying numbers of eosinophils, lymphocytes, and plasma cells. With special stains, droplets of Sudanophilic fat can be demonstrated within the cytoplasm of large giant cells within the lesions.

The most frequently involved areas are the skull, spine, pelvis, and femur. In 1956, Wells reported the typical "button sequestrum" which occurs in some lesions of the skull in patients with eosinophilic granuloma.¹² This feature of the disease was present in our patient (Figure 1). Lesions of the rib cage and long bones typically involve the medullary space.

Abnormal areas of increased uptake of radionuclide were present in several regions on the ^{99m}Tc bone scan in our patient. There was increased uptake in the skull (Figure 2), and an unsuspected area was detected within the right fourth rib (Figure 3). This uptake directed attention to the more surgically accessible rib lesion, from which the final diagnosis was provided by excisional biopsy.

References to the scan findings in patients with eosinophilic granuloma are sparse and, for the most part, are made in passing during the discussion of scan findings in other disease processes. There are few specific references to eosinophilic granuloma in the standard textbooks of nuclear medicine.^{7, 8} As eosinophilic granuloma is a completely destructive lesion with little proliferative response, logic would indicate that the bone scan would be normal in these patients. Charkes, *et al.* reported normal bone scans in two patients with eosinophilic granuloma reported incidentally in their discussion of scanning in the detection of metastatic disease.⁹ In their discussion of Paget's disease, Klein and Lund incidentally reported a positive bone scan in a patient with focal destruction of the ilium due to eosinophilic granuloma. There are no specific references to scan findings as such in patients with eosinophilic granuloma. The paucity of references provided the stimulus for this report. The positive bone scan in our patient indicates that the scan as currently performed is a very sensitive study, and may prove positive in completely destructive lesions such as eosinophilic granuloma.

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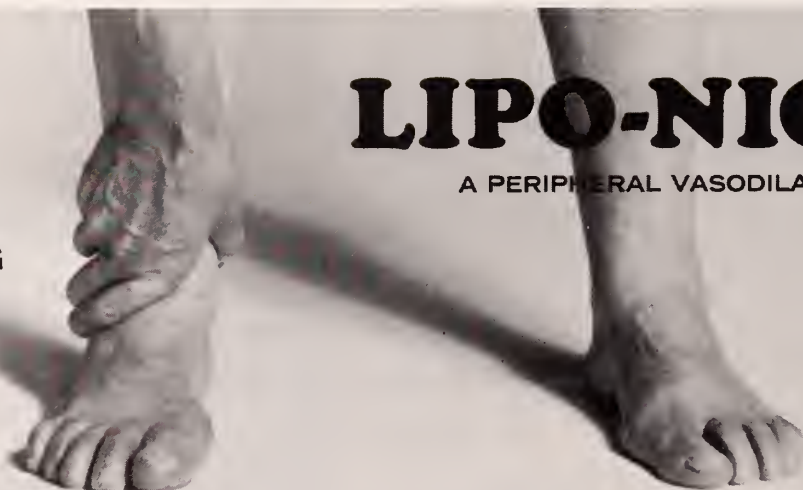
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Hemangiopericytoma is a rare vascular tumor presumed to be of pericyte origin. A case report of hemangiopericytoma of the left infratemporal fossa is presented with a review of the literature. Although a rare entity, the diagnosis of hemangiopericytoma deserves respect because of its high incidence of recurrence and metastasis. The tumor is unpredictable: 11.7 to 45 percent of the patients develop metastases, and the local recurrence is 36.3 to 80 percent. Histologic appearance has not been a very useful guideline for predicting clinical behavior. The clinical course is usually protracted, but hemangiopericytoma can be highly malignant, with death ensuing in a few months.

Hemangiopericytoma:

A Case Report and Review of the Literature

G. Padoil-Trinidad, M.D., R. M. Briggs, M.D., and R. R. Rickert, M.D. Livingston*

Hemangiopericytoma is a rare vascular tumor presumed to be of pericyte origin. Because it is infrequent in the plastic surgical literature,¹ the following case report and review of the literature are presented.

Case Report

A 28-year-old male noted a slow-growing asymptomatic mass at the left temporal region over a three-year period.



Figure 1 — Left temporal region revealing contour irregularity of overlying skin due to mass.

The mass measured approximately four cm. in outside diameter. (Figure 1) It was firm, well defined, nontender, and not adherent to overlying skin. The mass was further emphasized on clenching of the teeth. Due to uncertainty, excision was recommended to establish diagnosis and for cosmetic reasons.

At surgery the mass was found to lie beneath the temporalis muscle in the infratemporal fossa below the zygomatic arch. (Figure 2) The resected lesion was a well-circumscribed, oval mass which measured $5.0 \times 3.0 \times 2.0$ cm. and weighed 19



Figure 2 — At surgery, mass on left cheek indicating large size.

grams. The tumor was tan, had a firm texture and, on cut surface, presented a slightly lobulated appearance. (Figure 3)

Histologically, the tumor was composed of spindle to oval shaped cells growing in bundles with a striking vascular pattern (Figure 4-a). Delicate reticulin fibers surrounded individual tumor cells. Reticulin stains also revealed separation of the proliferating cells from the vascular endothelium. (Figure 4-b) Rare mitotic figures were seen and there was slight cytologic atypia. Final histologic diagnosis, confirmed by electron microscopic studies, was hemangiopericytoma.

Discussion

Hemangiopericytoma was first described by Stout and Murray as a vascular tumor of

*Dr. Trinidad is Chief Resident and Dr. Briggs is an Associate Attending in the Department of Plastic and Reconstructive Surgery at St. Barnabas Medical Center, Livingston, New Jersey. Dr. Rickert is an Attending in the Department of Pathology at the same facility.



Figure 3 — Gross photograph of cut surface of resected tumor showing pale-tan, slightly lobulated appearance.

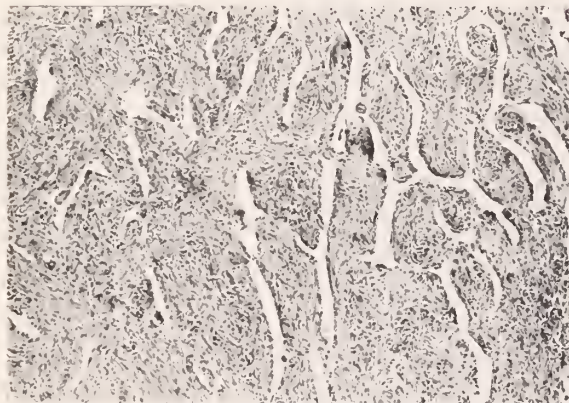


Figure 4-a — Low power photomicrograph showing spindle cell tumor with prominent ramifying vascular spaces (H & E $\times 300$).

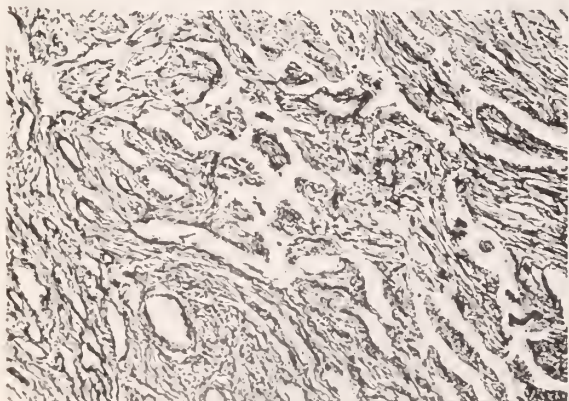


Figure 4-b — Photomicrograph showing reticulin meshwork which separates proliferating cells from vascular endothelium. Reticulin fibers also surround individual tumor cells (Reticulin stain $\times 300$).

pericyte origin.² Clinically, these soft tissue tumors which occur at any age in either sex, are slow growing and painless. Patients frequently seek medical attention when the tumor is

already large. Stout believed that blood vessels were an integral part of the hemangiopericytoma and not simply part of the supportive framework.³ The tumor itself is composed of pericytes which are related to the glomus tumor, but without the organoid structure of the latter.

On gross examination the tumor is firm, has a well-defined capsule and is traversed by fibrous trabeculations. Histologically the tumor has a profuse proliferation of capillaries, each one surrounded by a connective tissue sheath. Adjacent to this sheath are the tumor cells or pericytes, which vary greatly in their appearance from polygonal to spindle shape, arranged as solid sheets.

Over 300 cases of hemangiopericytoma have been reported in the literature since the first description in 1942. The majority of these lesions occur in the musculoskeletal areas.⁴ A review of the literature revealed that hemangiopericytomas represent one percent of all vascular neoplasms.⁵ The tumor is unpredictable; 11.7 to 45 percent of the patients develop metastases, and local recurrence rate is 36.3 to 80 percent.⁶

Histologic appearance has not been a very useful guideline to some authors for predicting clinical behavior,^{7,8} but a recent report from the Mayo Clinic classified tumors as benign, borderline, or malignant on the basis of mitotic activity and cellular anaplasia.⁹ Utilizing their published criteria, the present case would be classified as borderline. In the Mayo Clinic series six of sixteen patients with borderline lesions died of metastatic tumor.

The usual treatment is surgical excision with a cure rate of over 50 percent.¹⁰ Walike and Bailey presented 45 cases where hemangiopericytoma presented in the head and neck region.⁵ Of these cases, two were metastatic to the head and neck. After treatment, 40 percent recurred locally and 10 percent metastasized to distant sites. The lesions in the head and neck occurred in the nose, maxilla, neck, mandible, buccal sulcus, eyelids and parotid.

Spread occurs by hematogenous and lymphogenous routes, with lung and vertebral col-

umns the most common locations.⁶ Regional lymph nodes are often involved. Death has been caused by pulmonary involvement in some cases. The clinical course is usually protracted, but hemangiopericytoma can be highly malignant, with death ensuing in a few months.

Summary

A case report of hemangiopericytoma of the left infratemporal fossa is presented with a review of the literature. Although rare, the diagnosis of hemangiopericytoma deserves respect because of its high incidence of recurrence and metastases.

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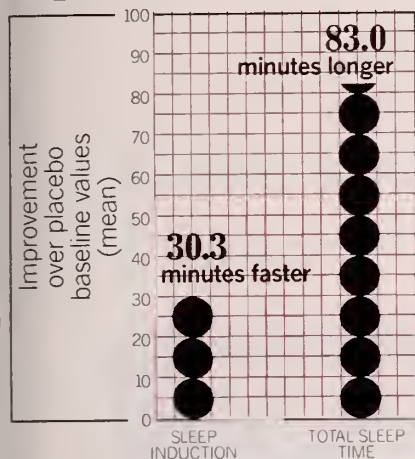
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A case of bronchial adenoma causing partial obstruction of the left lower lobe bronchus which resulted in recurrent pneumonia is here presented. Partial bronchial obstruction can lead to recurrent infection with little x-ray evidence of the underlying endobronchial process. The use of fiberoptic bronchoscopy and bronchography in the diagnosis of this case is described. A review of the clinical, pathologic, and radiographic manifestations of bronchial adenoma is presented, as well as discussion of appropriate therapy and unusual manifestations.

Bronchial Adenoma Causing Recurrent Pneumonia

Frank T. Vallario, M.D., Fred M. Jacobs, M.D., James A. Hogan, M.D., Livingston*

Patients with bronchial adenoma usually have clinical manifestations which depend on multiple factors (Table 1).¹ A patient with recurrent pneumonia, related to partial obstruction of the left lower lobe bronchus by a bronchial adenoma, was studied by fiberoptic bronchoscopy and bronchography.

Table 1

Etiology of Clinical Manifestations of Bronchial Adenoma¹

1. Tumor itself
 - (a) Cough—mainly productive
 - (b) Hemoptysis—
 - (1) Recurrent small hemoptysis
 - (2) Not more than half the patients
 - (3) Sometimes related to menses
 - (4) Usually related to ulceration of tumor or distal infection
2. Mechanical effects
 - (a) Dyspnea
 - (1) Atelectasis
 - (2) Obstructive emphysema
 - (3) Unilateral wheezing
3. Secondary infection
 - (a) Recurrent pneumonia
 - (b) Bronchiectasis
 - (c) Long Abscess
 - (d) Emphysema
 - (e) Finger clubbing
4. Metastasis
 - (a) Similar to metastases from other tumors, (Metastases from cylindromata and carcinoid are more slow-growing)
5. General effects
 - (a) Carcinoid syndrome
6. Endocrine effects
 - (a) Cushing's Syndrome
 - (b) Acromegaly
 - (c) Pleuriglandular adenomatosis

Case Report

A 28-year-old housewife was referred to the pulmonary service at St. Barnabas Medical Center because of recurrent left lower lobe pneumonia. She had four episodes of left lower lobe pneumonia (Figure 1) during the past two years; each episode resolved slowly. Eventually all symptoms and x-ray abnormality completely cleared. (Figure 2) The past medical history was unremarkable; there was no history of tuberculosis. She did not smoke.

Physical examination revealed a well-nourished, healthy-appearing female. Vital signs were normal. There was no clubbing or cyanosis of the digits. The heart sounds were normal. Chest was resonant and no rales were heard. The only pertinent physical findings were decreased breath



Figure 1 — Left lower lobe pneumonia.

*Dr. Vallario is Pulmonary Fellow; Dr. Jacobs is Chief of Chest Service, and Dr. Hogan is Director of Medicine, St. Barnabas Medical Center, Livingston.



Figure 2 — Complete resolution of the left lower lobe pneumonia after 3 months.

sounds in the left lower chest. The laboratory evaluations were completely normal.

Fiberoptic bronchoscopy and bronchography were performed during a quiescent period. Approximately four cm. beyond the carina in the left main stem bronchus, the examiner encountered a smooth glistening polypoid lesion which occluded 80 percent of the lumen. (Figure 3) No biopsy was obtained. Thoracotomy and left lower lobectomy were performed and a bronchial carcinoid was removed.



Figure 3 — The fiberoptic bronchoscope visualized in the area of the left main stem bronchus and outline of the endobronchial lesion with diodrast.

Discussion

The clinical features of recurrent pneumonia, hemoptysis and intermittent cough in relatively young patients should suggest the diagnosis of bronchial adenoma. The chest x-ray may be normal or may exhibit the tumor or the secondary mechanical effects of the tumor. A dominant feature of the patients described by Batson, *et al.*⁸ was a perihilar mass with discrete borders. Evidence of distal suppurative diseases, such as atelectasis, pneumonia, bronchiectasis, or abscess also may be observed; obstructive emphysema may occur as the result of a ball valve action of the endobronchial tumor.

Tomography of any central mass may demonstrate a smooth endobronchial component; bronchography defines the endobronchial lesion and the appearance of the distal lung parenchyma. Since bronchial adenomas are generally covered by intact epithelium and ulceration of these lesions is not common, cytology is usually not diagnostic.

Bronchoscopy should be performed when the diagnosis of bronchial adenoma is suspected. Endobronchial lesions were seen in approximately 80 percent of patients in Goodner's series.⁹ Biopsy of these lesions, however, is not recommended since the carcinoid variety, the most common type of bronchial adenoma, is highly vascular. Biopsies of fifteen patients in Batson's series¹ resulted in one death and two copious hemorrhages. Bronchography at the time of bronchoscopy can define the lesion and the appearance of the distal lung parenchyma, but the tissue diagnosis should be established at surgery.

Cell Types

Bronchial adenomas represent approximately one percent of all primary lung tumors, with carcinoid the most frequent cell type (82 percent) (Table II). Cylindromas and mucoepidermoids represent approximately 10 percent and 8 percent respectively. No difference in sex incidence was found but there is a wide variety of age distribution in bronchial adenomas. The youngest reported case was found in a child aged 13, although tumor has been found in patients in the ninth decade.

Table II
Frequency by Tumor Type

	Carcinoid	Cylindroma	Mucoepidermoid	Mixed	Sex		Average Age (years)	
					Male	Female		
Wilkins, <i>et al.</i> ¹³ 82 patients	69 (84%)	7 (9%)	6 (7%)		41	41	44 M	38 F
Bowers ³ 28 patients	21 (75%)	1 (4%)		1 (4%)**	11	17	50	
Batson, <i>et al.</i> ¹ 43 patients	36 (84%)	6 (14%)	1 (2%)		17	25	40	
Donahue, <i>et al.</i> ⁶ 35 patients	31 (89%)	4 (11%)			15	20	49	
Burcharth and Axelsson ⁴ 26 patients	23 (88%)	2 (8%)	1 (4%)		14	12	48	
Miller and Hopeman ⁹ 33 patients	27 (82%)	3 (9%)	3 (9%)		25	8	30 carcinoid 21 mucoepidermoid 41 adenocystic	
Turnbull <i>et al.</i> ¹² 61 patients	44 (72%)	5 (8%)	12 (20%)		22	22	49 carcinoid 59 mucoepidermoid 47 adenocystic	
Goodner, <i>et al.</i> ⁸ 27 patients	22 (81%)	5 (19%)			16	11	48	
Zellos ¹⁴ 40 patients	33 (83%)	6 (15%)	1 (2%) (1 showed features of both)		17	23	43	

**5 not classified

Bronchial adenomas were originally thought to be benign tumors, but currently they are classified as primary malignant tumors of mucus gland origin. Payne, *et al.*¹¹ included the following subtypes:

- (1) Carcinoid tumor is usually localized but occasionally metastasizes.
- (2) Cylindromas (adenoid cystic carcinoma) although slow growing are particularly lethal adenocarcinomas. This is a markedly infiltrative carcinoma which has a tendency to involve the major bronchi and carina.
- (3) Mucoepidermoid tumors are rare, less aggressive, locally malignant lesions.
- (4) Mixed tumor of salivary gland type although rare can occur in the bronchial tree. They are slow-growing tumors with a tendency to recur in multiple nodules after surgical resection. Carcinomatous transformation (malignant mixed tumor) does occur; local recurrence with invasion of adjacent structures may sometimes cause death in the absence of distant metastasis.¹¹

Treatment and Prognosis

Although bronchial adenomas grow both intra-bronchially and extrabronchially, the latter component is usually much larger. Surgery is the treatment of choice. Endoscopic resection may be indicated in patients who are unable to tolerate thoracotomy, but reports of fatal hemorrhage and high recurrence rate make endoscopic resection a poor alternative to surgery. At operation local metastatic lymph glands should be removed since many patients have survived without recurrence even in the presence of regional lymphatic spread.

Burcharth and Axelsson² emphasize that 81 percent of bronchial adenomas grow invasively and 27 percent frequently metastasize. Frozen sections should be used liberally to prove that all margins are free of tumor at the time of resection. Because of its slow growth and slower development of metastasis, radical surgery in cases of extensive infiltrating tumor and reoperation in the event of recurrence are recommended.² Radiation has no application in the carcinoid or mucoepidermoid variety, although it is frequently effective in the cylindromas.⁶

Bronchial carcinoids may produce serotonin and may be associated with the carcinoid syndrome. They also may be associated with other endocrinopathies, notably Cushing's syndrome, acromegaly and pleuriglandular adenomatosis.¹¹

The prognosis of bronchial adenoma is much better than that of bronchogenic carcinoma. The ten-year cumulative survival was 63.8 percent in Donahue's series and 70 percent in Wilkin's series,⁶ regardless of method of therapy.^{4,6} The cumulative 10-year survival for resected bronchial adenoma was 82 percent as compared to 18 percent for resected bronchogenic carcinoma.⁶

Cylindroma recurred more frequently and caused death by a factor of seven times as compared to carcinoids.

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St. Barnabas Medical Center, Livingston

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order by number from: Protective Services Resource Institute, Rutgers Medical School, P.O. Box 101, Piscataway, New Jersey. Following is the list of titles and the number of each cassette:

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12. Politics of Child Abuse

Coping with Medical Obsolescence

There are so many pressing problems facing the practicing physician today that it is difficult to know which side of the fort needs reinforcements at any given moment. Professional liability, national health insurance, governmental involvement in medicine, rising costs of medical care, consumerism, demands of society, and technologic advances are but a few of our major difficulties. However, the most important from the point of view of our "profession" is the question of obsolescence of each individual's knowledge and its effect on his ability to practice medicine.

Specialty Boards

Can this be measured by "re-examination" which measures only *knowledge* as shown by the ability to pass an examination or should we use "competence in practice" which includes both knowledge and the art of medicine as the criterion of obsolescence. The debate rages furiously with the "Boards" anxious to maintain their power by demanding re-examination of knowledge and the practicing physicians who feel that "performance" is what counts. Many of us oppose the Boards, but because of our own insecurities we are led like sheep by our vocal and powerful leaders down the path of least resistance called "multiple choice." Is reason being replaced by rationalization?

There is no question that Congress and consumer groups have been pressuring the medical profession to prove its competence. We are accused of not keeping up and it is suggested that our "lack of knowledge" leads to malpractice. However, it has been shown that malpractice suits are more often brought against competent, certified individuals than the opposite. This pressure is increased by our own colleagues who are not in the private practice of medicine and who claim that the average practitioner does not keep up.

The academicians make up the various specialty boards. In turn the specialty boards have now

become a measuring device used by government and other bureaucracies in recruitment and promotion to measure competence.¹ The Board examinations have degenerated into examinations on basic science and other test criteria that can be measured, rather than measuring the competence of the individual in the everyday care of patients. This measurement of "knowledge" is then called "competence" and so the halo is placed, deserved or not, since knowledge does not measure competence nor does it measure the most important facet of practice—"performance."

One of the ways to overcome obsolescence (promoted by the American Medical Association) has been the Physician's Recognition Award based on continuing medical education using selected categories. This program has spawned an endless number of courses and journals with self-assessment examinations so that each physician could achieve his "brownie points." Has this any merit? Of course it has some.

There are those who insist that knowledge is the first (and only) requisite and with knowledge one can be a better doctor. There is no question that one must have basic knowledge in order to care for patients, but this is only half the picture. In an editorial Robert J. Levine² points out that some of the best residents did not do well on National Board Examinations. Those of us who have been training interns and residents over the years have found the same thing to be true. Many of our best bedside physicians have not done well on written examinations for reasons that are not readily apparent. In 1956, Peterson, *et al.*³, failed to show a correlation between continuing medical education and the quality of medical care given by a group of family physicians in North Carolina. Lewis, *et al.*⁴, found similar results. This would indicate that continuing medical education by itself does not necessarily improve medical care. Knowledge and good medical care are not synony-

mous. As Aring pointed out in a recent editorial,⁵ "To re-evaluate physicians with traditional national or specialty board examinations which assess memorized knowledge will not tell what they will do with patients. They may delineate a particular segment of the professions, but there is nothing that says that a scoundrel can't memorize. How a physician proceeds can be demonstrated by an audit of action that depends more on the proper discipline in approaching medical problems than on memory." However, monitoring this becomes an almost impossible task.

Does the PRA really do any good? After having spent a number of years as Chairman of the Committee on Medical Education of The Medical Society of New Jersey, I feel that it does, in spite of the negative reports that I have just quoted above. It brings absentee physicians into courses, back into making hospital rounds and acquiring new knowledge. It also stimulates them into *thinking*, which is one of the major purposes of education. It makes them go back to books and to the consultants when they have a case that presents similar problems.

I think then we can say that "continuing medical education," in all probability, is of some benefit. The taking of courses, the attendance at grand rounds, the reading of journals and the listening to tapes are all of value, perhaps only subliminally. They will make the physician alert to the presence of new facts and materials and will stimulate him to look them up when he needs them.

The value of this type of program was well documented by James Rogers⁶ in his recent paper. This demonstrated a step forward in education planning that will have a future impact by upgrading the interest of the hospital administrator, the Board of Trustees, the medical librarian, the records librarian as well as the Department of Medical Education. This must, in time, affect every staff member and ultimately improve medical care.

Recertification — Relicensure?

Is the recertification examination or the relicensure examination a better way to overcome

medical obsolescence? Has this any unique merit? For many years the American College of Physicians has been giving self-assessment examinations which have been heralded as being of great value and of great importance. The College has pointed out that this has been a great source of learning and value for many physicians and has developed new examinations every few years. In 1974, however, this was not enough. They too had to jump on the bandwagon of recertification, following the lead of the American Academy of Family Practice. This was to be the new "Midas Touch" to prevent obsolescence. For the first, a syllabus was published which reviewed the new material in each of the various specialties. This "pony" was to help those who were to take the self-assessment examination and then the American Board of Internal Medicine recertification examination which followed. A high percentage of the takers passed the exam.

No two people do well with the same type of examination. Some prefer true and false, others multiple choice and still others lean toward essay questions. Some fancy the computer type of exam and others "case management." It is next to impossible to find one technique that will truly evaluate all the takers. Therefore, to give one examination to all people and then grade them all on the same "bell curve" is unrealistic. This is fine for the beginning student whose young mind is a blank and can learn new things because it has no previous experience to disrupt the thought. However, this is not a good method for trained physicians because no two of us have had the same experience. Therefore, the same set of questions means different things to different people.

In an editorial by Howard L. Horns⁷ in *JAMA* he made the point that the practice of medicine is varied and pluralistic in nature. Physicians are different in their methods and aptitudes for acquiring new knowledge. Physicians neither learn the same way nor think the same way, so it follows that they do not give the same answers in examinations. Some have auditory, some visual, and some discussion type learning aptitudes with totally different methods of applying this knowledge. We, therefore, must

develop several methods of maintaining professional competence and new methods of examining physicians to measure their competence. We must make allowances for performance characteristics as well as knowledge and skills.

Performance

Finally, in studying obsolescence, we must look also at the other side of the coin—"performance." Excellent performance is the goal that the patient wants to see achieved. However, this is a difficult factor to measure. Again, we must deal with the pluralistic nature of medical practice and patient care. The physician must know how to "lay on hands." He must understand the "art of medicine." The "bedside manner" is not a dead issue. At times it is more important to know how to talk to the dying patient than to identify the type of malignancy. There is much that one can do to help the patient through those dark hours. It is very difficult to tell which really is more important at times.

The term, "art of medicine," does not imply the old snake oil salesman. It is a truly demanding ability to recognize the needs of the patient as the physician carefully evaluates the history. He must be able to respond to the patient's needs by switching roles to "father," "friend," "brother" (or "sister"), or "teacher," but never to "judge." He must show interest and concern so that the patient will accept his scientific knowledge and follow through on the studies needed and the medications prescribed. He must convince the patient of his sincerity, interest, ability, and whole-hearted involvement or all his medical knowledge is wasted. Failure to do so means the patient will feel rejected and will not cooperate. What examination measures these abilities which are the *sine qua non* of medical practice?

Measurement of performance becomes a horrendous task involving many techniques that we have not perfected and may not perfect for many years. However, performance is important so we must learn to evaluate it. In judging performance we cannot use outcome alone as shown by Lindsay, *et al.*⁸ They did a quality of care assessment of the outpatient management

of acute bacterial cystitis. The outcome wasn't much different whether the assigned criteria were carefully followed or not. The authors stated, "This study highlights the difficulty of assessing the quality of outpatient medical care by a process audit. Although the criteria committee had little difficulty agreeing on processes of care for acute bacterial cystitis that would indicate a high quality of medical practice, no significant positive association could be demonstrated between performance of these processes and the outcome of care."⁸

This is not surprising since many problems in medicine can be treated differently with the same outcome. That is not really the criterion. Some criteria are patient comfort, speed with which the patient recovered, and how the patient felt about his care. It is not all art or science; these elements must be combined for the best mix. This is a complex problem. All of the continuing medical education, recertification examinations, and examinations for relicensure will not make the physician one iota better if he loses the human touch and forgets that it is a patient in front of him and not a computer problem.

Mueller⁹ pointed out that continuing examinations must be restructured, have different objectives and measure different facets of the patient care transaction than those given at the start of the physician's career. Continuing medical education is not enough. The goal also must be oriented toward continued medical production. It was the product of the trained physician that needed examination during the physician's productive years and not his knowledge. The author pointed out that productive capacity examinations would provide a measure of the adequacy of patient care to society, its cost effectiveness, and cost benefit.⁹ This is a most interesting thought and adds another facet to a problem which already may have too many facets.

Peer Review

Ann Somers, at a recent meeting of the American Society of Internal Medicine spoke on "Assessing Physician Performance in Ambulatory Care."¹⁰ She emphasized the need for

"quality protection." To achieve quality protection one must have (a) technical competence, (b) good physician-patient relationship, (c) institutional procedures to monitor medical care, and (d) corrective action when necessary.

This is a positive approach. I still believe that his peers are the ones who can best judge a physician's competence, ability, and knowledge. They work with him every day. They see how he handles cases in the hospital (which is only one facet of his practice) and they can truly judge him and make sure he maintains a high quality of medical care. Though medical audit is not the best way, it is one way of doing it along with measuring outcome, length of stay, and the approach of the physician to the patient. Here at least, the physician who uses some unorthodox method may need to account to his peers, who may be surprised to learn that his "unorthodox" method may be the right one under these circumstances. Somers' good idea really might be the way we should go in the future.

In summary, what have I tried to say about overcoming medical obsolescence and how to measure it? First of all, it has been shown that continuing medical education probably does improve patient care somewhat. Its greatest good is in the fact that it maintains the alertness and the interest of the physician and makes him cognizant of the fact that there are continuous changes.

Secondly, I do not believe that recertification (or relicensure) by an examination that measures knowledge is of any benefit whatsoever; it is a true exercise in futility satisfying only those who give the examinations, but in no way does it improve the quality of medical care.

Thirdly, "evaluation of performance" is perhaps the best way to approach this problem when and if we ever get a method to truly evaluate "performance."

Finally, we have been accused of not being very good policemen, i.e., not really doing the job when it comes to peer review. We have this opportunity now under PSRO. If we structure it properly and combine it with good medical

audit, we may get a result which will be better than all of the other methods of continuing medical education. This may be our shining star, our hope for the future. We certainly need something, because all of our present methods are really very ineffective. Let us anticipate that the combination of good monitoring, medical, surgical, and tissue committee audit, and PSRO, combined into a healthy, but demanding approach will provide an answer to this very difficult question of how to avoid physician obsolescence.

In conclusion, let us not yet become doctrinaire. I quote William Graham Sumner: "Doctrines are the most frightful tyrants to which men are subject because doctrines get inside of a man's reason and betray himself against himself."

Arthur Bernstein, M.D.

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NEW JERSEY DOCTORS' NOTEBOOK

Trustees' Minutes

January 16, 1977

A regular meeting of the Board of Trustees was held on Sunday, January 16, 1977, at the Executive Offices, Trenton. Detailed minutes are on file with the secretary of your county medical society. A summary of significant actions follows:

John J. Bedrick, M.D.—Memorial Resolution
... Stood for a moment of silent prayer for John J. Bedrick, M.D., 173rd President of The Medical Society of New Jersey, who died suddenly on December 20, 1976.

... Adopted the following memorial resolution:

John J. Bedrick, M.D.
1910-1976

Whereas, Almighty God, the Supreme Author of life and action has summoned from our midst his good servant and our beloved colleague, John J. Bedrick, M.D.; and

Whereas, as a member and Fellow of The Medical Society of New Jersey and an Alternate Delegate to the AMA, Doctor Bedrick rendered uniformly high and valuable service to The Medical Society of New Jersey and the people of our State; and

Whereas, by his understanding, wit, dependability, and kindness he won the affectionate esteem of all who knew him; now therefore be it

RESOLVED, that The Medical Society of New Jersey, honoring John J. Bedrick, M.D. in death as in life, records its profound grief at his passing; and be it further

RESOLVED, that a copy of this resolution be spread upon the minutes of this meeting and that another copy, suitably prepared, be presented to his bereaved family in token of heartfelt sympathy.

... Noted that a memorial contribution to the Medical Student Loan Fund was made on January 3, 1977 in memory of Dr. Bedrick.

Committee on Long Range Planning and Development ... Took the following actions on the recommendations of the Executive Committee concerning the Report on the Study of a Medical Directorship for The Medical Society of New Jersey:

1. Concurred with the opinion of the Executive Committee that candidates for presidential offices should be selected on the basis of ability and competence.

2. Concurred with the opinion of the Executive Committee that some reorganization and delineation of the duties of the present presidential officers should be considered and that all of the presidential officers should increase their activities in ceremonial and other delegated official business of the Society.

Note: It was suggested that the Chairman of the Board of Trustees also be included in this concept.

3. Concurred with the opinion of the Executive Committee that the Committee on Long Range Planning and Development consider the merging of the duties of the Secretary of the Board of Trustees with those of the Secretary of the Society.

4. Approved the following recommendation which resulted from the suggestion that the Executive Committee be structured to include the immediate past-president:

That the Standing Committee on Revision of Constitution and Bylaws be directed to develop the appropriate Bylaw language.

5. Concurred with the opinion of the Executive Committee that the Executive Committee meet on a regular basis to discuss the responsibility and duties of the presidential officers—a concept which has been implemented for the past several years.

6. Concurred with the opinion of the Executive Committee that compensation for Presidential officers be reconsidered and made commensurate for the time and effort demanded, and directed that the matter be referred to the Committee of Finance and Budget.

Note: It was suggested that the basis might be a per diem for expanded responsibilities set by the committee and that the Chairman of the Board of Trustees be included in the concept.

Rutgers HMO Certificate of Need . . . Concurred in the action of the Executive Committee (see *JMSN* 74:168, February 1977) who agreed that the Executive Officer should write to Commissioner Finley questioning irregularities in the Certificate of Need application of the Rutgers HMO—unethical advertising, financial irresponsibility, restrictions on patients, and use of non-licensed personnel. The possibility of litigation was entertained if illegal practices are documented.

Guidelines for Oxygen Therapy in Newborn . . . Requested that MSNJ communicate with the New Jersey State Society of Anesthesiologists and the New Jersey Chapter of the American Academy of Pediatrics concerning the status of the Department of Health guidelines for use of oxygen therapy in the newborn.

Note: A communication to the Department of Health in November had offered the advice of physicians expert in a given procedure, when regulations of a clinical nature are contemplated. The Commissioner responded that because the guidelines were concerned only with one mode of therapy in the neonatal time period, consultation was obtained only from neonatologists.

. . . Directed that a communication again go to the Commissioner of Health reaffirming the Society's previous offer of assistance.

Senate Hearing on S-992, S-1039, and S-1751

. . . Authorized the President and the Chairman of the Board to appear on January 26 at a public hearing concerning two bills which specify criteria to be used when certifying that death has occurred (S-992 and S-1039) and a third bill which determines the circumstances under which a "right to die" exists (S-1751).

Orthopaedic Society Proposal re Open Reductions and Joint Replacements . . . Noted that the Board of Directors of the Insurance Exchange had considered a proposal from the New Jersey Orthopaedic Society that "any physician performing open reductions of fractures and/or total joint replacements shall be classified as OS 5 under medical liability insurance and charged accordingly." The response stated that "at the present time no change can be made because the filings and classifications are frozen but that the request will be considered as soon as an updating of experience is made."

Guidelines for Health Care Facilities in Care of Comatose Patients . . . Directed that the final guidelines for assisting the medical profession and governing authorities of health care facilities in the implementation of the procedures required by the New Jersey Supreme Court for cases similar to that of Karen Ann Quinlan be referred to the Executive Committee for review.

CMDNJ Notes

Stanley S. Bergen, Jr., M.D.
President, CMDNJ

The College of Medicine and Dentistry of New Jersey actively participates in a number of specialized programs, to maximize the use of existing facilities and to optimize service to the community of New Jersey. Some, of course, are new; some have a record of experience; some are local in nature; and some are regional.

An example of an older program with regional characteristics is the affiliation with the Eye Institute of New Jersey, which has become the prime source of educational experience for the Associated Eye Residencies Program covering the Newark Eye and Ear Infirmary of the United Hospitals Medical Center, the Jersey City Medical Center, Martland Medical Center, and East Orange Veterans Administration Hospital. These hospitals provide the clinical base for many activities of the CMDNJ-New Jersey Medical School's Department of Ophthalmology.

The Eye Institute is of interest not only for its contribution to the school, but as a specialized resource for ophthalmologists throughout the state. For the description of it that follows, I am indebted to Alphonse A. Cinotti, M.D., acting chairman of the Department of Ophthalmology, CMDNJ-New Jersey Medical School, and medical director of the Eye Institute, and to Marshall Klein, director of the Eye Institute. The Institute occupies about 12,000 square feet in the annex of the United Hospitals Medical

Center and provides the specialty outpatient services in pediatric ophthalmology, motility, orthoptics/pleoptics, retinal ultrasonography, corneal contact lens services employing six different kinds of lens material, glaucoma, oculo-plastic, low vision, neuro-ophthalmology, uveitis, and electrophysiology laboratories for ERGs, VERs, and EOGs to determine hereditary disease of the retina. It is the center for the teaching program in ophthalmology for the College and provides reference library services and offices for the department chairman and staff. It has been declared a state-wide resource for eye programs and information by the New Jersey Department of Education.

Special equipment within the Institute includes an argon laser, xenon photocoagulator, ultrasound unit, and a complete medical photography department, including closed circuit video tape equipment.

In addition to the sponsorship of the College and the Newark Eye and Ear Infirmary of United Hospitals, the Institute enjoys the support of many community organizations. The Fight for Sight, Inc., has made it the site for the fourth Children's Fight for Sight Center in the United States. The New Jersey Federation of Women's Clubs has made the Eye Institute its project for the coming year. The Lions Clubs have donated funds toward the purchase of much of the ophthalmological equipment, including the argon laser. The electron microscope presently in the Department of Microbiology was donated by the Lions Club.

The New Jersey Eye Bank, housed within the Eye Institute, is the collecting agency for corneal tissue. Ophthalmologists requiring tissue make their needs known to the Eye Bank. Some tissue which is available for practicing physicians and residents is not suitable for transplant and is being used in the Institute's Microsurgery Laboratory for practice surgery.

In January 1975, the first course in eye enucleating for funeral directors was presented; ten subsequent courses have been given. Over two hundred funeral directors in New Jersey are now qualified to remove donor eyes.

The Department of Ophthalmology, through the Eye Institute, has been involved actively in community screening programs in health care centers, senior citizen organizations, and day care agencies. The Medical Society of New Jersey in conjunction with the Eye Institute and the Lions Eyemobile Foundation conducted a screening program in front of the State House in Trenton during the legislative session last year. A city-wide screening program has just been launched to uncover ocular problems, particularly amblyopia in pre-school children. It is estimated that there are 43,000 amblyopic children in Newark between the ages of 3 and 5.

Ongoing educational programs offered at the Eye Institute include: optics review course, basic science review course in preparation for ophthalmology boards, monthly grand rounds which feature lectures by prominent physicians on all phases of ophthalmology, weekly lectures given by the staff of the CMDNJ-New Jersey Medical School Ophthalmology Department, and ophthalmic-assistant courses which have been set up to train personnel presently employed in clinics and doctors' offices.

The Rutgers School of Nursing has included in its curriculum for seniors a course held at the Eye Institute. Essex County College also has expressed interest in the Institute as a source of educational material for its students. Preliminary meetings have indicated this will be a successful endeavor.

Numerous clinical research projects are being conducted by the Department of Ophthalmology. The pediatric service has instituted screening in the intensive care nursery for neonatal disease. The SITE machine, the only one in the State, is being used for tissue extraction and anterior segment reconstruction. Photography of this and other procedures for resident and attending staff provide invaluable information for improving technique and efficiency.

The close relationship maintained by all affiliated institutions has been the reason the programs have developed so swiftly and effectively. We look forward to greater and more splendid achievements.

Report from the Foundation

Daniel J. O'Regan, M.D., Medical Director

A new administration and a new Congress are addressing themselves, hopefully, to the protection of the public welfare. Translating campaign promises and party platforms into practical programs is usually less than successful. Medical care in all its aspects again will have high priority. Public advocates insist on improved accessibility to high quality care at reasonable cost. "Alternative" systems of delivery of care, and the manner in which it is paid for, are being talked about more and more. The alternatives include more use of ambulatory facilities of all kinds, instead of the expensive in-patient hospital stay. Policies which induced patient and doctor to have workups and treatment for minor ailments done in the hospital are being reexamined. Utilization review, second surgical opinions, and preadmission testing are aimed at reducing hospital use to the essentials. Another alternative is the prepayment system. Prepayment formulas with the providers at some risk tend to increase efficiency. The development of Health Maintenance Organizations (HMOs) in New Jersey is now at the stage of attracting the attention of our colleagues in several parts of the State.

An alternative to the closed-panel, single-site HMO is the Individual Practice Association, or IPA. As you know, the Foundation has been interested in this concept for some time. It can be a real meeting ground for the planners of "alternate" systems and the physician. It combines the principles of accessibility, efficiency in expenditures, and reduction in in-patient hospital encounters. It also allows the physician to practice in his own office, with freedom of choice for physician and patient. It is the only one of the "alternatives" which preserves the best of the traditional delivery with the new goals of efficiency. The quality of the services delivered is established by the peers of the practicing physician. Peer review is the essential part of the IPA structure; without the judgments of experienced practitioners, it would be just another "cost control" mechanism. That is *not* what we are investigating. Our committee is involved in surveys and feasibility investigations in accordance with its charge from MSNJ.

New Jersey SIDS Program

The New Jersey Sudden Infant Death Syndrome Program, a new state-wide service to families whose infant dies of Sudden Infant Death Syndrome (SIDS) or crib death, has begun functioning under the auspices of the New Jersey State Department of Health. The program is in the Division of Community Health Services and is coordinated with activities of Parental and Child Health Services.

The program is one of thirty-one throughout the United States which was brought into existence through the Sudden Infant Death Syndrome Act of 1974 (P.L. 93-270) which authorized DHEW to make grants for projects which provide information and counseling services to SIDS families and to collect, analyze, and furnish information relating to the causes of SIDS. The law also authorized that public information and professional educational materials be developed and disseminated to health care providers, public safety officials, and to the general public.

The SIDS Program has planned its services to provide a uniform reporting and autopsy system by medical examiners; information about SIDS to parents, professionals, paraprofessionals, and the public; counseling services to families who experience SIDS; and analysis of data about SIDS deaths to search for the cause of the disease.

The Program began operation on July 1, 1976. It is expected that between 170 and 250 referrals will be received during each year from all areas of the State, the majority of which will come from county medical examiners, who will have been oriented thoroughly to the program by Michael M. Lyons, M.D., Assistant State Medical Examiner, and who will report each SIDS death in their jurisdiction to the SIDS Program office, so that parents may be offered information and counseling services.

On a nationwide basis, 8,000 to 10,000 infants per year die unexpectedly of the disease. It is the largest cause of death in infants under one

year of age. In 1975, in New Jersey, 166 deaths were attributed to SIDS. These infants, between the age of one month and one year, usually die during sleep. The death is unexpected because the baby's growth and development have been normal and the autopsy fails to demonstrate an adequate explanation for death.

The tragedy of SIDS is two-fold: the waste of a human life in its early stages of development and the harsh psychological trauma which the baby's death causes to family members. Grief and mourning are not short-lived, but are frequently accompanied by manifestations of excessive guilt, blame, and depression. It is the prevention of this emotional pathology that is the prime concern of this program. As soon as the family is referred to the SIDS Program at Trenton, a telephone contact is made to the parents of the baby to convey sympathy, to give information about SIDS and answer questions, and to offer the services of a public health nurse in their town who is knowledgeable about SIDS. The nurse will visit with family members in their home, give accurate information about SIDS, and encourage verbalization of feelings about the death of their baby and about other family problems that may arise from it; in other words, to provide emotional support during the period of grief.

To be eligible, a family needs to reside in New Jersey and have experienced the death of an infant due to Sudden Infant Death Syndrome which has been verified through autopsy. The nurse will make her first visit during the impact phase of the crisis and will suggest using available support persons within the normal environment to help with the days and tasks ahead. The nurse's next visit will be made during the turmoil phase of the crisis. Hopefully, through the experience of non-judgmental interactions with non-family members, the persons will be freer of negative feelings and more able to move on through the grief process. The nurse's third visit will be made toward the end of the grief process, the time of adjustment when families are recovering their normal problem-solving skills and beginning to experience hope for the future. Thus, the crisis intervention by the nurse

is viewed as an opportunity for growth and adjustment.

Another service which the nurse will offer is referral to SIDS Parent Groups. The National SIDS Foundation has a New Jersey chapter in Maplewood, telephone (201) 763-6671. The International Guild for Infant Survival has a New Jersey chapter in Oaklyn, telephone (609) 858-5809. These groups, made up of parents who have had a similar tragic experience, assist by providing emotional and educational support. They also speak in educational programs for civic and community groups. Literature and films can be obtained from the Parent Groups and the New Jersey SIDS Program. Three films are presently available: "After Our Baby Died" is a description of the SIDS event and several parents' reactions; "A Cry for Help" is designed to show to emergency care personnel their response to an SIDS event; "You Are Not Alone" is designed to be shown to SIDS parents.

Should the families request or need it, the public health nurse can refer them for social services or other professional services.

The New Jersey SIDS Program has its office at the New Jersey State Department of Health, John Fitch Plaza, P.O. Box 1540, Trenton, New Jersey 08625. Telephone: (609) 292-5616. For a referral of an SIDS death during night hours, weekends, and holidays, there is an emergency answering service at (609) 392-2020. The contact person is Patricia Dorsa, M.S.N.

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Therapeutic Drug Information Center*

The Schwartz Inter-National Pharmaceutic and Therapeutic Drug Information Center of the Brooklyn College of Pharmacy, Long Island University, compiles the information contained in this column each month. The Center serves as a source of intelligence on therapeutic and pharmaceutic information not readily available to physicians, at no charge to them, and provides this information with minimal time involvement. It is staffed by trained pharmacists; Jack M. Rosenberg, Pharm. D., Associate Professor and Chairman, Division of Clinical Pharmacy, Brooklyn College of Pharmacy, is Director and Walter Modell, M.D., Emeritus Professor of Pharmacology at Cornell University Medical College, is pharmacologist consultant. The service is available Monday through Friday from 9 a.m. to 4:30 p.m.—telephone (212) 622-8989 or 303-2735. The following are questions and answers handled by the Center recently.

1. Could you supply information concerning the FDA's position on the use of phenformin?

Phenformin (DBI®, Meltrol®), a biguanide derivative, is an oral hypoglycemic agent that is completely unrelated to the sulfonylureas (tolbutamide—Orinase®, chlorpropamide—Diabinese®, tolazamide—Tolinase®, acetohexamide—Dymelor®) in chemical structure and in mode of action. Its specific mechanism of action is unknown. Unlike the sulfonylureas, it exerts its hypoglycemic effect through an extrapancreatic mechanism and doesn't stimulate insulin production. It is believed to decrease gluconeogenesis, inhibit the intestinal absorption of glucose, and *in vitro* has been shown to increase glucose utilization by enhancing anaerobic glycolysis. This last-named action is thought to occur as a result of, or coincident with, an inhibition of cellular respiration and as a consequence the concentration of lactate increases.¹

There have been numerous reports of lactic acidosis, an often fatal metabolic acidosis, in patients receiving phenformin.^{2,3} (At least 552 cases have been reported during the last 13 years.⁴) Thus the FDA's Endocrinology and Metabolism Advisory Committee has been studying the implication of this adverse reaction. Recently they recommended the removal of phenformin from the market after hearing presentations from FDA consultants and a group of experts from Ciba-Geigy. This action is based on the belief that a casual relationship has been established between the use of the drug and lactic acidosis.⁵

* This month's column was prepared by J.M. Rosenberg, M.S., Pharm. D., P. Sangkachand, B.S., R.Ph., M.K. Raina, M. Pharm., Ph.D., W.A. Simon, Pharm. D., Brooklyn College of Pharmacy, LIU.

Ciba-Geigy on the other hand states that lactic acidosis is a known, though uncommon, complication of diabetes. There are many causative factors of lactic acidosis, and in susceptible patients, phenformin appears to be one of them. Moreover, lactic acidosis also has been seen in patients receiving other oral antidiabetic agents and insulin. Furthermore, they insisted that phenformin should not be used in clinical situations that predispose to lactic acidosis; such as, excessive use of alcohol, certain cardiac diseases, kidney disease, or liver disease.⁵

In conclusion, phenformin continues to be marketed, but the FDA's Endocrinology and Metabolism Advisory Committee recommends its removal from the market. At this time, the future marketing status of this drug is uncertain.

References

- ¹ Goodman LS, Gilman A: *The Pharmacological Basis of Therapeutics*, 5th ed. New York, MacMillan, 1975, p. 1524.
- ² Conlay LA, Loewenstein JE: Phenformin and lactic acidosis. *JAMA* 235:1575-1578, 1976.
- ³ Romankiewicz JA: Phenformin-associated lactic acidosis: A review. *Am J Hosp Pharm* 32:502-507, 1975.
- ⁴ Personal communication (letter) from Geigy Pharmaceuticals to author, December 21, 1976.
- ⁵ "The Pink Sheet." F.D.C. Reports, 2-10 (Oct 25) 1976.

2. Please provide information concerning sulindac.

Sulindac (MK 23®, Clinoril®) is a new non-steroidal, anti-inflammatory, analgesic agent. Chemically it is an acetic acid derivative, and is being investigated by Merck Sharp and Dohme in the United States for the treatment of osteoarthritis and ankylosing spondylitis. The product has been shown to possess analgesic properties superior to ibuprofen (Motrin®) and appears to cause fewer gastrointestinal side effects.

Dieppe and associates¹ conducted an eight-week, double-blind-controlled, clinical trial to compare the effectiveness of sulindac (400 mg/day) and ibuprofen (1200 mg/day) in 40 patients with osteoarthritis of the hip. The two drugs were comparable in terms of patient preference, effects on hip movements, and toxicity. Sulindac showed superior analgesic properties to ibuprofen, resulting in a significantly greater reduction in pain on weight bearing and with passive movements. Mild side effects occurred with both drugs with equal frequency.

Calabro and colleagues² carried out a multiclinic trial of sulindac in 70 patients with hip osteoarthritis to determine the effectiveness of the drug and if twice-a-day administration produced significantly different effects than four-times-a-day administration. Patients were assigned randomly to one of the three treatment groups: (1) sulindac given twice daily, (2) sulindac given four times daily, and (3) placebo. The dosage of sulindac varied from 100 to 300 mg daily for both treatment groups. Evaluation of 15 efficacy measurements showed no difference between sulindac given two or four times daily and that the treatment produced a significant difference in 11 out of 15 measurements compared to placebo. Adverse effects to sulindac included gastrointestinal upset, rash, and dizziness, usually transient and mild to

moderate in severity. Serial laboratory studies revealed no renal, hepatic, or hematopoietic toxicity.

Liebling, *et al.*,³ conducted a double-blind, multiclinic trial of sulindac in the treatment of ankylosing spondylitis. Eighty-three patients were randomly assigned to three treatment groups as follows; sulindac twice a day, sulindac four times a day, and placebo. Sulindac was given in a dosage range of 200 to 400 mg per day for a maximum of three weeks. Data suggested that sulindac was a safe and effective agent in the therapy of ankylosing spondylitis, and that both the treatment groups (twice or four times a day) were equally effective. No statistically significant differences were observed with regard to adverse reactions between the two sulindac groups.

Cohen⁴ conducted a study to determine the capacity of sulindac to induce gastrointestinal bleeding. Sulindac was tested for fecal blood loss in 40 healthy male subjects. Two daily dose levels of 240 mg and 400 mg were compared with 4.8 gm of aspirin and placebo for 15 days. At day 15, aspirin-induced blood loss was greater than that of both dose levels of sulindac or placebo. There were no significant differences in blood loss between the two sulindac groups and the placebo group.

In conclusion, the preliminary evidence suggests that sulindac is a promising new anti-inflammatory agent.

References

¹ Dieppe PA, *et al.*: Sulindac in osteoarthritis of the hip. *Rheumatol Rehabil* 15:112-115, 1976.

² Calabro JJ: Multiclinic trial of MK-231[®] in hip osteoarthritis. *Clinical Pharmacol Therap* 17:230, 1975.

³ Liebling MR *et al.*: A double-blind, multiclinic trial of sulindac (BMG-213[®]) in the treatment of ankylosing spondylitis. *Arthritis Rheum* 18:411, 1975.

⁴ Cohen A: Intestinal blood loss after a new anti-inflammatory drug, sulindac. *Clinical Pharmacol Therap* 20:238-24, 1976.

3. In response to questions concerning aspirin for children's dosages, the following is presented.

Two letters which appeared recently in the medical literature have brought attention to the discontent with the current dosage directions that appear on the labels of aspirin for children. This matter takes on additional significance since aspirin is one of the most commonly ingested childhood poisons.³

The current package literature for aspirin for children (81 mg or 1¼ gr tablets) recommends the following dosage schedule which is based on age: under three years, as directed by physician; age three years, one tablet; four through five years, two tablets; six through nine years, three tablets; ten through 14 years, four tablets. The label also contains the following warning, "Children's dose may be repeated in three hours, if necessary, but not more than three times a day unless prescribed by a physician who may direct larger doses. In which case, follow his advice exactly."⁴

Both medical and consumer groups, as well as the major producers of aspirin for children, have asked the FDA's OTC Internal Analgesic Panel to reconsider label dosage recommendations for aspirin for children. The logic behind these recommendations is that the current dosage recommendations are subtherapeutic. In addition, if the parent does not see a beneficial response to the administered dose, he or she may increase the aspirin dosage sometimes to a toxic level. Though this is *not official*, upward revisions similar to the following have been considered: under two years as directed by the physician; two to three years, two tablets (162 mg); four to six years, three tablets; seven to eight years, four tablets; nine to ten years, five tablets; 11 to 12 years, six tablets; 13 years and older, eight tablets.

In conclusion, most experts agree that current children's aspirin dosage recommendations are subtherapeutic. Lack of results have led parents to administer double and sometimes toxic doses to their children. Consumers, physicians, and industry all have recommended to the FDA's OTC Internal Analgesics Panel to adjust dosage upward. It is likely that new label dosage directions, similar to those above, will be approved.

References

¹ Anon: Dosages on baby aspirin. *Drug Therapy* 6:158, 1976.

² Goldstein GS: Children's aspirin dosage. *Drug Therapy* 6:16, 1976.

³ Trapnell K: Salicylate intoxication. *J Amer Pharm Assoc* 16:147-149, 1976.

⁴ Package Insert for St. Joseph Aspirin for Children. Plough, Inc.

⁵ Personal communication between Glenbrook Laboratories and author.

Commemorative Bottle Sale for Medical Student Loan Fund

In conjunction with the celebration of the 50th anniversary of the Medical Society of New Jersey Auxiliary a limited number of commemorative amethyst glass bottles will be available for sale during the Annual Meeting to benefit the Medical Student Loan Fund. Each bottle will be embossed with the seal of the Auxiliary on one side and with the MSNJ headquarters building on the reverse. The cost is \$7.50.

PHYSICIANS SEEKING LOCATION IN NEW JERSEY

The following physicians have written to the Executive Office of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ANESTHESIOLOGY—Ei Shun Lin, M.D., 3905 Carpenter Avenue, Apt. 1-C, Bronx, New York 10466. China Medical College (Taichung, Taiwan) 1970. Subspecialty, general practice. Board eligible. Solo, partnership, single specialty group. Available July 1977.

Dong Hyun Kim, M.D., 122 Beal Street, Lunenburg, Massachusetts 01462. Yonsei Medical School (Korea) 1962. Board certified. Solo, partnership, single specialty group. Available.

Lessly V.T. Sebastian, M.D., 353 East 17th Street, Apt. 8-C, New York, New York 10003. National (Taiwan) 1965. Board eligible. Group or partnership. Available July 1977.

CARDIOLOGY—Harrison Y.N. Yang, M.D., 1901 Dorchester Road, Apt. 5-B, Brooklyn, New York 11226. Taiwan 1970. Subspecialty internal medicine. Board eligible (IM) Hospital-based practice in cardiology, or teaching post. Available July 1977.

GASTROENTEROLOGY—Elliot H. Borak, M.D., 505 East 14th Street, New York, New York 10009. NYU 1970. Board eligible. Group. Available July 1977.

GENERAL PRACTICE—Stanley Y. Lin, M.D., Box 389, Jordan, Montana 59337. Taiwan 1966. Subspecialty, internal medicine. Board certified. Partnership, single or multispecialty group, emergency, solo. Available July 1977.

HOUSE PHYSICIAN—Rukhsana Mughal, M.D., 6879 Hickory Hill Drive, Mayfield, Cleveland, Ohio 44143. Dow (Karachi, Pakistan) 1973. Any specialty. Available.

INTERNAL MEDICINE—Antony Cyril Ernest, M.D., 2537A Ocean Parkway, Brooklyn, New York 11235. University of Ceylon 1967. Subspecialty, cardiology. Board certified. Group, partnership, solo. Available July 1977.

Ramesh Chandra Gupta, M.D., 88 Mary Street, Apt. 815, Paterson 07503. R.N.T. Medical School (India). Subspecialty, gastroenterology. Board eligible. Group, partnership, solo. Available July 1977.

Pak-Chun Chan, M.D., 1801 Mt. Pisgah Lane, Apt. 13, Silver Spring, Maryland 20903. National Taiwan University 1970. Primary care group or internal medicine (solo). Available July 1977.

Masood A. Rizvi, M.D., 115 Old Short Hills Road, West Orange 07052. K. G. Medical College (India).

Subspecialty, gastroenterology. Board certified. Group, partnership, solo. Available July 1977.

Charles Ifeanyi Okonkwo, M.D., 410 Maryland Avenue, Apt. 1-A, Staten Island, New York 10305. Manchester (England) 1971. Subspecialty cardiology. Board certified. Hospital-based group, partnership, solo. Available July 1977.

James L. Stammer, M.D., 5314 La Cieniga Circle, San Antonio, Texas 78233. CMDNJ 1970. Subspecialty, gastroenterology. Board certified. Partnership, institutionally-based, single-specialty group. Available August 1977.

Carlo Cecchetti, M.D., 400 Artyle Road, Brooklyn, New York 11218. Wisconsin 1972. Subspecialty, gastroenterology. Board eligible. Multi-specialty or single-specialty group, partnership. Available July 1977.

Elihu N. Goken, M.D., 5509 Greentree Road, Bethesda, Maryland 20034. Einstein 1973. Subspecialty, endocrinology. Board eligible. Single or multi-specialty group, partnership, solo. Available July 1977.

Mavidi K. Hariprasad, M.D., Medical Service, New York VA Hospital, 23rd and 1st Avenue, New York 10010. Madras (India) 1971. Subspecialty, nephrology. Board certified. Institutionally based, single or multi-specialty group, partnership. Available July 1977.

Victor G. Galati, M.D., 662 85th Street, Brooklyn, New York 11228. NYU 1972. Subspecialty, pulmonary diseases. Board eligible. Single specialty group, institutionally based, or solo. Available July 1977.

Barry H. Lubin, M.D., 15221 NE 6th Avenue, Apt. A201, Miami, Florida 33162. Hahnemann 1974. Board eligible. Partnership, single or multi-specialty group, industrial, emergency room. Available July 1977.

Charles J. Jaffe, M.D., 6009 Anniston Road, Bethesda, Maryland 20034. Duke 1971. Subspecialties, allergy, hematology. Board certified. Research, single or multi-specialty group, institutionally based. Available July 1977.

David R. Gutknecht, M.D., 174 Townhouse, Briarcrest, Hershey, Pennsylvania 17033. Cornell 1971. Board eligible. Single or multi-specialty group, research, institutionally based. Available July 1977.

Ramesh H. Rathod, M.D., 7449 Washington Avenue, Forest Park, Illinois 60130. Bombay (India) 1969. Subspecialty, cardiovascular diseases. Board certified. Single or multi-specialty group, solo. Available July 1977.

Muhammed T. Butt, M.D., 33 Highland Street, Apt. 3-H, New Britain, Connecticut 06052. King Edward (Pakistan) 1971. Subspecialty, gastroenterology. Board certified. Single or multi-specialty group or institutionally based. Available July 1977.

Kenneth S. Lewis, 3701 Twin Lakes Court, Apt. 302, Baltimore, Maryland 21207. Jefferson 1974. Board eligible. Single or multi-specialty group, partnership, emergency room, institutionally based, research, industrial, solo. Available July 1977.

Gene H. Ginsberg, M.D., USAF Hospital Cannon AFB, Clovis, New Mexico 88101. Jefferson 1972. Board certified. Single or multi-specialty group, partnership, solo, or institutionally based. Available July 1977.

Joel R. Schulman, M.D., 319 E. 24th Street, Apt. 25-G, New York 10010. Boston 1972. Subspecialty, pulmonary diseases. Board certified. Single or multi-specialty group, partnership, institutionally based, research, or solo. Available September 1977.

Robert P. Hoffman, M.D., Naval Hospital, Burton, South Carolina 29902. Albany 1970. Subspecialty, infectious diseases. Board certified. Single or multi-specialty group, research. Available July 1977.

Ralph H. Starkey, M.D., 4656 Helensburg Drive, Chesapeake, Virginia 23321. Temple, 1970. Board certified. Single or multi-specialty group, institutionally-based, research. Available July 1977.

Paul Hess, M.D., 585 Richardson Road, Rochester, New York 14623. Cornell 1972. Subspecialty, cardiology. Board certified. Hospital-based, group, partnership. Available July 1977.

Surinder S. Thind, M.D., 3901 Conshohocken Avenue, Apt. 190, Philadelphia, Pennsylvania 19131. Ludhiana (India) 1968. Subspecialty, cardiology. Board eligible. Group or solo. Available July 1977.

Suketu H. Nanavati, M.D., 353 East 17th Street, New York, New York 10003 (Apt. 9-B). Bombay (India) 1969. Subspecialty, cardiology. Board certified. Solo or partnership. Available July 1977.

Charles Schiffer, M.D., 4 Grant Court, Guilderland, New York 12084. Cincinnati 1970. Subspecialty, nephrology. Board certified. Group or partnership. Available July 1977.

A.K. Patel, M.D., 1770 Grand Concourse, Apt. 8-K, Bronx, New York 10457. Ranchi (India) 1968. Subspecialty, gastroenterology. Board eligible. Solo or partnership. Available July 1977.

NEPHROLOGY—Stanley B. Garbus, M.D., LSU Medical Center, 1542 Tulane, New Orleans, Louisiana 70112. Geneva (Switzerland) 1962. Subspecialties, internal medicine and public health. Board eligible (IM). Public health, research, academic. Available June 1977.

OBSTETRICS and GYNECOLOGY—Alfonso Meza, M.D., 374 Stockholm Street, Brooklyn, New York 11237. Central University Quito (Ecuador) 1967. Partnership, group, solo. Available July 1977.

Marcos A. Lara, M.D., 355 Bard Avenue, Apt. 5-R, Staten Island, New York 10310. Havana, Cuba 1960. Board eligible. Group, partnership, solo. Available July 1977.

Seung Nam Kim, M.D., 3411 Wayne Avenue, 8-L, Bronx, New York 10467. Catholic Medical College (Korea) 1967. Group or partnership. Available July 1977.

Howard Grabelle, M.D., 20 Slayback Drive, Princeton Junction 08550. CMDNJ 1969. Board eligible. Group or partnership. Available July 1977.

Tzung-Lin Huang, M.D., 3021 Northgate Drive, Youngstown, Ohio 44505. Taipei (Taiwan) 1970. Solo or partnership. Available July 1977.

OPHTHALMOLOGY—Appireddy Bommareddy, M.D., 9293 Pickwick E., Taylor, Michigan 48180. Guntur (India) 1964. Board eligible. Group, partnership, solo. Available July 1977.

Lorin R. Press, M.D., 204-A Overmount Avenue, West Paterson 07424. CMDNJ 1973. Board eligible. Group or partnership. Available July 1977.

ORTHOPEDIC SURGERY—Roy B. Friedenthal, M.D., 6049 Huxley Ave., Bronx, New York 10471. New York Medical College 1973. Board eligible. Solo, partnership, single specialty group. Available July 1977.

PATHOLOGY—Emil B. Georgi, M.D., 5556 Broadview Road, Apt. 3621, Parma, Ohio 44134. Ain-shams University (Egypt) Board eligible. Group, partnership, solo. Available July 1977.

Jai Chul Cha, M.D., Institute of Pathology, 2085 Adelbert Road, Cleveland, Ohio 44106. Seoul National University (Korea) 1968. Partnership, solo, single or multi-specialty group, institutionally based. Available.

Amando Valencia Esguerra, M.D., 914 Lafayette Towers West, Detroit, Michigan 48207. Santo Tomas (Manila) 1965. Subspecialty, clinical pathology. Board certified. Partnership, solo, or single-specialty group. Available.

Michael R. Zimmerman, M.D., Univ. of Pennsylvania Hospital, 3400 Spruce Street, Philadelphia, Pennsylvania 19104. NYU 1963. Board certified. Partnership, institutionally based, research. Available.

PEDIATRICS—Soo Wook Chung, M.D., 3365 Arlington Avenue, Apt. #4, Toledo, Ohio 43614. Pusan, Korea 1969. Subspecialty, neonatology. Board eligible. Group or partnership. Available July 1977.

Nazir Ahmad, M.D., 43-44 Kissena Boulevard, Apt. 8-M, Flushing, New York 11355. Kashmir (India) 1968. Group, partnership, solo. Available.

Dion Ferandes, M.D., 3205 Cleary Avenue, No. 2, Metairie, Louisiana 70002. Poona (India) 1969. Subspecialty, allergy. Board certified. Available July 1977.

Do Sung Hwang, M.D., 1925 N. Senate Avenue, #26, Indianapolis, Indiana 46202. Pusan (Korea) 1964. Board eligible. Group, partnership, solo, or hospital. Available July 1977.

Robert A. Shanik, M.D., 8 Wooley Lane, Apt. B-24, Great Neck, New York 11023. Virginia 1974. Group or partnership. Available July 1977.

John Ertl, M.D., 4827 J Parkway, Sacramento, California 95823. SUNY (Downstate) 1970. Board eligible. Group or partnership. Available August 1977.

Joung Wha Lee, M.D., 1694 Walker Avenue, Union 07083. Seoul (Korea) 1967. Subspecialty, general practice. Partnership, solo, emergency room, public health. Available July 1977.

Edathil Karuna Karan, M.D., 1609 Gateway, Albert Lea, Minnesota 56007. Madras (India) 1959. Board certified. Single or multi-specialty group, research. Available.

Karunyan Arul, M.D., 766 Shepard Avenue, Hamden, Connecticut 06514. University of Ceylon (Sri Lanka) 1966. Board certified. Research, group, partnership, academic, public health, emergency room. Available October 1977.

Narayan Pundarik Nayak, M.D., 436 South Landsdowne Avenue, Apt. F-101, Yeadon, Pennsylvania 19050. Subspecialty, hematology. Board certified. Group, institutional, partnership, solo, industrial, emergency room, public health, research. Available.

David M. Namerow, M.D., 638 Hallmark Drive, Glen Burnie, Maryland 21061. Louisville (Kentucky) 1972. Board eligible. Single or multi-specialty group, institutionally based. Available July 1977.

Ronald S. Bashian, M.D., 2521 South Meridian Drive, Great Lakes, Illinois 60088. SUNY (Downstate) 1972. Board eligible. Pediatric or multi-specialty group. Available July 1977.

Mark B. Levin, M.D., 5100 Highbridge St., Apt. 50-E, Fayetteville, New York 13066. SUNY (Syracuse) 1974. Group, partnership, solo. Available July 1977.

Gianmaria Minervini, M.D., 374 Getz Avenue, Staten Island, New York 10312. NYU 1973. Board eligible. Solo, associate, or small group. Available July 1977.

Chalerm Sunhachawee, M.D., 112 Washington Street, Warsaw, New York 14569. Siriraj (Thailand) 1966. Board certified. Group, partnership, or solo. Available July 1977.

PHYSICAL MEDICINE AND REHABILITATION—

Marius Focseanu, M.D., 66-36 Yellowstone Boulevard, Apt. 15-G, Forest Hills, New York 11375. Bucharest 1959. Board eligible. Institutional, group.

Jau-Shiung Huang, M.D., 37-16 83rd Street, Apt. 2-G, Jackson Heights, New York 11372. Koahsiung (Taiwan) 1967. Board eligible. School health or institutionally based. Available.

PSYCHIATRY—Paul King, M.D., 445 East 68th Street, New York 10021. Cornell 1974. Board eligible. Partnership, single or multi-specialty group, institutionally based, school health administrative. Available July 1977.

Sureshchandra N. Desai, M.D., King Edward Building, Apt. B-411, 79-11 41st Avenue, Elmhurst, Queens, New York 11373. Baroda (India) 1969. Subspecialty, child psychiatry. Board certified. Hospital-based clinic, academic, group, partnership, solo. Available August 1977.

Angeline C. N. Desai, M.D., King Edward Building, Apt. B-411, 79-11 41st Avenue, Elmhurst, Queens, New York 11373. Ceylon (Sri-Lanka). Subspecialty, child psychiatry. Board certified. Hospital-based clinic, academic, group, partnership, solo. Available August 1977.

RADIOLOGY—Romeo C. Ouano, M.D., 3811 Albemarle Avenue, Drexel Hill, Pennsylvania 19026. Santo Tomas (Philippines) 1961. Special interest—diagnostic radiology and nuclear medicine. Board eligible. Group or hospital-based. Available July 1977.

Richard B. Circeo, M.D., 369 Coral Sea Circle, Fort Lee, Virginia 23801. Tufts 1961. Special interest—diagnostic radiology. Board certified. Solo or Group. Available August 1977.

RHEUMATOLOGY—Lawrence Russomanno, M.D., 702 Charlesgate Circle, East Amherst, New York 14051. Bologna (Italy) 1972. Subspecialty, internal medicine. Board certified (IM). Clinical practice as associate or partner. Available July 1977.

SURGERY—Norman L. Maron, M.D., Quarters 1216. MCB, Quantico, Virginia 22134. NYU 1970. Subspecialty, orthopedic surgery. Board eligible. Partnership or group. Available July 1977.

Richard Sacks, M.D., 43B Cambridge Terrace, Hackensack 07601. Meharry 1972. Board eligible. Solo, group, association. Available July 1977.

Kyung I. Kim, M.D., 2103 C Prior Road, Wilmington, Delaware 19809. Seoul (Korea) 1968. Subspecialty, orthopedic surgery. Group partnership, solo. Available July 1977.

Ashok Kumar Sinha, M.D., State General Hospital, Durgapur-6, West Bengal, India. Darbhanga (India) 1963. Group, partnership, solo, research, academic, institutionally based. Available.

Subhahs R. Puranik, M.D., 1835 Franklin Street, Denver, Colorado 80218. Poona (India). Subspecialty pediatric surgery. Group, partnership, or solo. Available July 1977.

Charles P. Clericuzio, M.D., 54 Victoria Place, Red Bank 07701. Wisconsin 1971. Subspecialty, vascular surgery. Group, partnership, or hospital-based academic/teaching position. Available July 1977.

UROLOGY—Alexander M. Panossian, M.D., 21 River Street, Apt. 386, Little Ferry 07643. Beirut (Lebanon) 1964. Board eligible. Any situation considered. Available.

Steven L. Sholem, M.D., P.O. Box 335, 1061 Segovia Drive East, Litchfield Park, Arizona 85340. Columbia 1969. Board eligible. Associate or solo. Available July 1977.

Hazem El-Droubi, 265-C Hackett Boulevard, Albany, New York 12208. Ain-Shams University 1969. Board eligible. Group or partnership. Available July 1977.

LETTER TO THE JOURNAL

Data on Cults Sought

December 15, 1976

Dear Sir:

For a statistical research purpose, we are attempting to accumulate data regarding the number of physicians, and other professional men in this country, who have had, or still have, members of their families involved with the so-called religious cults such as:

- 1) Occult—Witchcraft and Satan cults (Druids, etc.);
- 2) Vedic Hindu, such as Hare Krishna, Divine Light Mission, and so on;
- 3) Christian-based—Unification Church ("Moon"),

Church of the Bible Understanding (Forever Family), The way, and so on;

4) Political—The Weathermen, National Social Labor Coalition, and so on;

5) Pseudo-Scientific—Scientology, UFO, The Foundation (The Process), and so on;

6) Other

Inasmuch as there is a question of hypnosis being used by the cults, and also some questions regarding the health and well-being of members involved in cults, I would appreciate your cooperation in printing this letter.

Interested persons should reply to: John G. McConahy, M.D., (representing the Individual Freedom Foundation), 143 Valhalla Drive, New Castle, Pennsylvania 16105. We would also be interested in hearing from, or about, any physician who is, or has been, a member of such a cult.

(signed) John G. McConahy, M.D.

PERSONAL ITEM

Dr. Mackenzie Named Acting Director of Cancer Institute

James W. Mackenzie, M.D., Professor and chairman of the Department of Surgery at Rutgers Medical School-CMDNJ, Piscataway, has been appointed acting director of the Cancer Institute of New Jersey. A noted chest surgeon, Dr. Mackenzie succeeds Harry Demopoulos, M.D., who was Institute Director until January 1.

The Cancer Institute was formed two years ago to coordinate the organization of statewide programs in the prevention, early detection, and treatment of the disease, which afflicts New Jersey residents at a rate at least equal to that of any other state in the nation. The Cancer Insti-

tute program, which falls within the overall program of the National Cancer Institute, is aimed at promoting coordinated efforts among physicians of various disciplines, hospitals, researchers, educators and government in the statewide attack on the cancer problem.

Dr. Mackenzie, a resident of Princeton, joined CMDNJ-Rutgers as professor and medical department chairman in 1969, and served the school as its Dean from 1971 to 1975. He was graduated from the University of Michigan Medical School, and, prior to accepting the position at Rutgers Medical School eight years ago, he was head of thoracic and cardiac surgery at Missouri Medical School. He is a Diplomate of the American Boards of Surgery and Thoracic Surgery and is a Fellow of the American College of Surgeons. He also is a member of the American Association for Thoracic Surgeons and the American College of Chest Physicians.

ANNOUNCEMENTS

Course in Pediatric Clinical and Theoretical Allergy

In cooperation with the New Jersey Medical School, CMDNJ, the Children's Hospital of Newark is sponsoring a review course in clinical problems in pediatric allergy designed for pediatricians, family physicians, and allergists. The program runs from September through May. Lectures are held each Thursday from 11 a.m. to 12 noon in the Chapel Conference Room at United Hospitals of Newark. In addition a pediatric allergy clinic will be held from 8:30 to 10 a.m. on each of these days, and from 12 noon to 1 p.m. there will be a pediatric conference. Hour-for-hour credit will be awarded in Category I of the AMA Physician's Recognition Award. Tuition is \$100. For information, please address a communication to Arthur F. Fost, M.D., Director of Allergy, Children's Hospital of Newark, 15 South 9th Street, Newark 07107.

The schedule for March, April, and May is as follows:

- Mar. 10—Allergic Rhinitis, Vasomotor Rhinitis, Serous Otitis Media
- Mar. 17—Drug Therapy of Upper Respiratory Allergy
- Mar. 24—Pediatric Pulmonary Conference
- Apr. 7—Report on Allergy Congress
- Apr. 14—Drug Allergy
- Apr. 21—Insect Allergy
- Apr. 28—Pediatric Pulmonary Conference
- May 5—Veterinary Allergy
- May 12—Urticaria and Angioedema

Seminars in Psychiatry

The Medical Center at Princeton has announced its sponsorship of the following programs. Each session convenes at 12:30 p.m. at the Princeton House, the psychiatric facility affiliated with the Medical Center. AMA Category I credit will be awarded for attendance.

- Mar 10—Anthropology and Psychiatry, Part I
Edward Foulks, M.D.
Professor of Psychiatry
University of Pennsylvania
- Mar 24—Anthropology and Psychiatry, Part II
Edward Foulks, M.D.
- Apr 7—Program to be announced

- Apr 21—Community Mental Health Center and the Private Psychiatrist
Robert Leopold, M.D.
Professor of Psychiatry
University of Pennsylvania
- Apr 28—Forensic Psychiatry, Part I
Robert Sadoff
Assoc. Professor of Psychiatry
University of Pennsylvania
- May 12—Meditation
Gerald May, M.D.
- May 19—Forensic Psychiatry, Part II
Robert Sadoff, M.D.

Regional Chest Conference

On April 5 from 4 to 6 p.m., at St. Francis Medical Center in Trenton, the spring session of the Central New Jersey Regional Chest Conference will convene. Sponsors are the New Jersey Thoracic Society and the Delaware-Raritan Lung Association. The topic is "Pediatric Chest Disease" and the scheduled speaker is Frederick W. Floyd, M.D., Clinical Associate Professor at Jefferson Medical School. Application has been made for two credit hours in Category I of the AMA Physician's Recognition Award.

Lectures on Surgery

The Department of Surgery of Rutgers Medical School, CMDNJ, has announced the following program in its Visiting Professor Lecture series:

- Mar 1—Thyroid Cancer
Colin G. Thomas, Jr., M.D.
University of North Carolina
- Apr 5—Inflammatory Bowel Diseases
George Block, M.D.
University of Chicago
- May 3—Childhood Injuries
J. Alex Haller, Jr., M.D.
Johns Hopkins University
- June 7—Biology of Surgical Infection
Thomas J. Krizek, M.D.
Yale School of Medicine

Lectures are presented at 5 p.m. in the main auditorium at the school. For further information, please communicate with John H. Landor, M.D., Professor and Chief, Division of General Surgery, Rutgers Medical School, CMDNJ, University Heights, Piscataway 08854.

Seminars in Emergency Medical Care

The Inter-Agency Commission on Emergency Medical Care, in cooperation with The Medical Society of New Jersey, will conduct seminars in emergency medical care for physicians at the following hospitals on the dates noted:

St. Joseph's Medical Center, Paterson

April 6
April 13
April 20

Cooper Medical Center, Camden

April 6
April 13
April 20

Middlesex General Hospital, New Brunswick

April 28
May 5
May 12

Monmouth Medical Center, Long Branch

May 25
June 1
June 8

St. Elizabeth Hospital, Elizabeth

June 1
June 8
June 15

The subjects are the same at each hospital: cardio-respiratory emergencies (1st day), trauma in all specialties (2nd day), and pediatric, otolaryngology, ophthalmology, and dermatology emergencies (3rd day). Application has been made for Category I accreditation. A complete program and registration form have been sent to all physicians. For additional information, please communicate with Jack R. Karel, M.D., Chairman, Inter-Agency Commission on Emergency Medical Care, 115 North Avenue, Hillside 07205.

Course in Ultrasonography

The Johns Hopkins University School of Medicine, Department of Radiology and Radiological Science, with the participation of a staff from the University of Maryland, is presenting a five-day course for the practicing ultrasonographer. This is an ongoing course, which starts April 18 to 22. The morning programs consist of didactic lectures, demonstrations, and questions and answers. The afternoons are devoted to practical experience in

grey-scale, B-scan, and Real Time scanning. A late afternoon conference is held daily to review the day's clinical studies, and to provide follow-up. In addition, a library of recent books and reprints, a teaching file of bistable and grey-scale cases, and 40 hours of videotape lectures are available to the post-graduate student. The fee is \$350 and credit in Category I of the AMA Physician's Recognition Award will be given. Enrollment is limited to fifteen. For further information please communicate with Roger C. Sanders, M.D., Department of Radiology, The John Hopkins Hospital, Baltimore, Maryland 21205. Telephone (301) 955-6461.

AMNJ Annual Awards Dinner

The Annual Awards Dinner of the Academy of Medicine of New Jersey will be held on Wednesday, May 11 at The Chanticleer in Millburn. This year's recipient of the Edward J. Ill Award will be Arthur Bernstein, M.D., currently Secretary of MSNJ and Chairman of its Committee on Medical Education, and for many years (until resigning in June 1976) Chairman of the Committee on Annual Meeting. Scheduled to receive the Citizen's Award is Sister Patricia Aiden Lynch, CSJ. For further information and for reservation—tickets are \$30 each—please communicate with the Academy, C.J. Heitzmann, Executive Director, 2424 Morris Avenue, Union 07083—(201) 687-8780.

Gynecologic Laparoscopy

The New Jersey Fertility Foundation will sponsor a course in gynecologic laparoscopy in Roselle Park on June 3 and 4 and October 14 and 15. The course has been accredited for 20 ACOG cognates and for 13 hours in AMA Category I. For information please communicate with Sidney A. Wilchins, M.D., 14 East Westfield Avenue, Roselle Park, New Jersey 07204.

1977 Annual Meeting May 14-17

Emergency Medicine Congress

From May 22 to 25 at the Philadelphia Marriott Motel, the Mid-Atlantic Chapters of the American College of Emergency Physicians and the Emergency Department Nurses Association, in cooperation with state and local ambulance and emergency medical technician organizations, will sponsor the First Mid-Atlantic Regional Congress of Emergency Medicine (MARC I). The program will feature seminars, skills and technique sessions, research papers, and round-table discussions, each with a specific set of educational objectives. Most of the sessions will be discipline-oriented. Others

will be team-oriented to bring the groups together for a joint learning experience. Anticipated fees: for physician-members of ACEP \$200, non-members \$250; for members of the Emergency Department Nurses Association \$125, for non-members \$150; for ambulance personnel, members of cooperating organizations \$100, for non-members \$125. Both one-day (at 40 percent of full fee) and full-course registrations will be accepted. Luncheon is included. For information please address a communication to Ms. Rita Celmer, R.N., MARC I, 2513 Brown Street, Philadelphia 19130.

MEETINGS OF MEDICAL INTEREST

This listing is compiled through the cooperation of the Committee on Medical Education of The Medical Society of New Jersey, the Academy of Medicine of New Jersey, the New Jersey Chapter of the American Academy of Family Physicians, and the Office of Continuing Medical Education of the College of Medicine and Dentistry of New Jersey. For information on accreditation, please contact the sponsoring organization(s), indicated by italics—last line of each item.

Mar.

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| <p>9 Joint Conference
Coachman Inn, Cranford
(Sponsored by the New Jersey Thoracic Society and New Jersey Chapter American College of Chest Physicians)</p> <p>9 Obstructive Lung Disease
1:30 p.m. — Runnells Hospital, Berkeley Heights
(Sponsored by AMNJ and AAFP)</p> <p>9 Current Chemotherapy, Breast Cancer
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)</p> <p>9 Management of Patients in Diabetic Coma
9-11 a.m. — Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)</p> <p>9 Disorders of Biliary Tract and Pancreas
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)</p> <p>9 Anatomy for Surgeons
16 4 p.m.-9 p.m. — Rutgers Medical School, Piscataway
30 (Sponsored by CMDNJ and AMNJ)</p> <p>9 Specialized Techniques in Family Therapy
16 7:30-9:30 p.m. — Seton Hall University, South Orange
23 (Sponsored by AMNJ and New Jersey Center for
30 Family Studies)</p> <p>9 Care and Treatment of Rheumatic Diseases
16 12-30 p.m. — Burlington County Memorial Hospital
(Sponsored by Burlington County Memorial Hospital and AAFP)</p> | <p>9 Allergy and Immunology
23 7:30-8:30 a.m. — Alexian Brothers Hospital, Elizabeth
30 (Sponsored by Alexian Brothers Hospital and AAFP)</p> <p>9 Grand Rounds in Ob/Gyn
16 2-4 p.m. New Jersey Medical School, Newark
23 (Sponsored by CMDNJ and AMNJ)
30</p> <p>9 Urology and Hypertension
16 9-11 a.m. — West Jersey Hospital, Voorhees
23 (Sponsored by West Jersey Hospital and AAFP)
30</p> <p>9 Winter, 1977 CME Program
10:30 a.m. — Clara Maass Memorial Hospital, Belleville
(Sponsored by Clara Maass Memorial Hospital and AAFP)</p> <p>9 Hypertension
1-3 p.m. — Christ Hospital, Jersey City
(Sponsored by Christ Hospital, AMNJ, and AAFP)</p> <p>10 Elizabeth Tri-Hospital Endocrine Conferences
24 8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)</p> <p>9 Special Rounds, Pediatrics
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)</p> <p>9 Fifth Joint Conference
9:30 a.m.-4:00 p.m. — Coachman Inn, Cranford, NJ
(Sponsored by N.J. Thoracic Society, ACCP and AMNJ)</p> |
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Mar.

- 10 **Urology and Trauma**
5-6 p.m. — St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)
- 10 **Cancer in New Jersey**
9 p.m. — Mountainside Hospital, Montclair
(Sponsored by Essex County Medical Society and AAFP)
- 10 **Combined Endocrinology Seminar**
- 24 **Thyroid Function**
10:30 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 10 **Perennial Allergic Rhinitis, Vasomotor Rhinitis and Serous Otitis Media**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 10 **Use and Abuse of Dialysis**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 10 **The Media and Medicaid**
- 17 **Subject to be announced**
- 24 **Subject to be announced**
- 31 **Sleep Disorders**
12 noon — Carrier Clinic, Belle Mead
(Sponsored by Carrier Clinic)
- 10 **Basic Sciences and Clinical Applications**
- 11 3:30 p.m. — Burlington County Memorial Hospital,
- 24 Mount Holly
- 31 (Sponsored by Burlington County Memorial Hospital and AAFP)
- 10 **Topics in Neurosurgery**
- 17 4-5 p.m. — VA Hospital, East Orange
- 24 (Sponsored by CMDNJ, VA Hospital and AMNJ)
- 31
- 11 **AAP Spring Meeting**
- 13 Paradise Island Hotel, Nassau, Bahamas
- 11 **Neuroanatomy and Neuropathology**
2:45-3:45 p.m. — Trenton Psychiatric Hospital
- 18 **Clinical Neurology**
4-5 p.m. — Trenton Psychiatric Hospital
(Sponsored by Trenton Psychiatric Hospital)
- 11 **Cardiology Conferences**
- 18 7:30-8:30 a.m. — St. Elizabeth Hospital, Elizabeth
- 25 (Sponsored by St. Elizabeth Hospital and AAFP)
- 12 **Advances in Orthopedic Surgery**
- 19 8:30-10:30 a.m. — N.J. Medical School, Newark
- 26 10 a.m.-12 noon — (Third Saturday Only)
(Sponsored by CMDNJ and AMNJ)
- 12 **The Family Therapist's Own Family**
- 13 9 a.m.-4 p.m. — Holiday Inn, East Orange
(Sponsored by AMNJ and New Jersey Center for Family Studies)
- 14 **Acute Renal Failure**
5-6 p.m. — St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)
- 14 **Couples Group Therapy**
- 21 7-9 p.m. — Various locations
- 28 (Sponsored by AMNJ and New Jersey Center for family Studies)
- 14
- 21 **Basic Science for Surgeons**
- 28 3-4 p.m. — Martland Hospital, Newark
(Sponsored by CMDNJ and AMNJ)
- 15 **Chronic Hepatidities**
- 22 8-9 a.m. — Paterson General Hospital
- 29 (Sponsored by Paterson General Hospital and AMNJ)
- 15 **Breast Cancer**
5:30-6:30 p.m. — St. Mary's Hospital, Orange
(Sponsored by AMNJ and St. Mary's Hospital)
- 15 **Hematology — Diagnosis of Anemia**
12 noon — St. Mary's Hospital, Orange
(Sponsored by AMNJ and AAFP)
- 16 **Bronchial Asthma**
11:30 a.m.-12:30 p.m. — V.A. Hospital, East Orange
(Sponsored by East Orange V.A. Hospital)
- 16 **Physical Medicine in Office Practice**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 16 **Extreme Infection**
1 p.m. — Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)
- 16 **Special Rounds, General Surgery and Specialties**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 16 **Thyroid Diseases**
1 p.m. — Trenton Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
- 16 **Current Advances in Cancer Management**
9-11 a.m. — Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)
- 16 **Forensic Psychiatry**
1-2:30 p.m. — Marlboro Psychiatric Hospital
(Sponsored by Marlboro Psychiatric Hospital and AMNJ)
- 16 **Concepts of Success Phobia**
3-4:30 p.m. — Fair Oaks Hospital, Summit
(Sponsored by AMNJ and Fair Oaks Hospital)
- 2 **Chronic Obstructive Pulmonary Disease**
- 16 **Acute Renal Failure**
- 30 **Bedside Diagnosis of Heart Disease**
10:30-12 noon — Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
- 2 **Drug-Induced Psychosis**
- 16 **Recent Developments in Mental Health Law**
1-2:30 p.m. — New Jersey Medical School, Newark
(Sponsored by CMDNJ and AMNJ)

- 2 **Cardiology Conference**
- 16 4-6 p.m. — Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)
- 16 **New Concepts and Review of Internal Medicine**
- 30 1-3 p.m. — Bayonne Hospital
(Sponsored by CMDNJ and AMNJ)
- 16 **M.S. Update — '77**
9 a.m.-4:30 p.m. — Cherry Hill Inn
(Sponsored by So. NJ Chapter National Multiple Sclerosis Society and AMNJ)
- 16 **Common Medical Problems**
8-9 a.m. — So. Ocean County Hospital, Manahawkin
(Sponsored by Burlington County Memorial Hospital and AAFP)
- 17 **Postgraduate Symposia in Surgery**
7:30-8:30 a.m. — West Jersey Hospital, Voorhees
(Sponsored by West Jersey Hospital, University of Pennsylvania and AAFP)
- Elizabeth Tri-Hospital Hematology Conferences**
- 17 8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 17 **Drug Therapy of Upper Respiratory Allergy**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 17 **Family Counseling**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 17 **Management of Angina**
5-6:30 p.m. — Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
- 17 **Chronic Nephrosis**
5-6 p.m. — St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)
- 17 **Toxic Factors in Shock**
9:30-10:30 p.m. — Woodbury Country Club, Woodbury
(Sponsored by Gloucester County Medical Society and AMNJ)
- 18 **Sodium and Potassium Metabolism**
9-10 a.m. — St. Francis Medical Center, Trenton
(Sponsored by Hahnemann Medical College and AMNJ)
- 18 **Headache**
12 noon — Freehold Area Hospital
(Sponsored by AMNJ and AAFP)
- 18 **Pediatric Endocrinology**
10 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 18 **Psychosomatic Aspects of Etiology of Cancer**
8:30-10:30 p.m. — Cedar Hills Country Club, Livingston
(Sponsored by New Jersey Psychoanalytic Society, MSNJ and AMNJ)
- 19 **Surgically Reversible Hypertension**
9 a.m.-12:30 p.m. — St. Barnabas Medical Center, Livingston
(Sponsored by Nephrology Society of New Jersey and AMNJ)
- 19 **Vascular Surgery**
10-11 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 19 **Emergency '77**
8:30 a.m. — Benjamin Franklin High School, Ridgewood
(Sponsored by The Valley Hospital, Ridgewood)
- 19 **Management of Urgent Problems in Vascular Surgery**
9 a.m.-12 noon — Monmouth Medical Center, Long Branch
(Sponsored by Monmouth County Medical Center and AMNJ)
- 21 **Dialysis**
5-6 p.m. — St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)
- 21 **Advance in Medicine — 1977**
Cerroamar Hotel, Puerto Rico
(Sponsored by N.J. Academy of Family Physicians)
- 22 **Echo-Cardiography**
8 p.m. — Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
- 22 **Pacemakers**
12 noon — Hospital Center at Orange
(Sponsored by AMNJ and AAFP)
- 22 **Peptic Ulcer Disease**
12 noon — West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 22 **Treatment of Recurrent Breast Cancer**
8-10 p.m. — Englewood Hospital
(Sponsored by The Englewood Surgical Society and AMNJ)
- 23 **Third Annual Cancer Teaching Day**
9 a.m.-5 p.m. — Englewood Hospital
(Sponsored by The Englewood Hospital Association and AMNJ)
- 23 **Current Radiation Therapy, Breast Cancer**
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 23 **Arthritis**
11:30 a.m. — Rahway Hospital
(Sponsored by AMNJ and AAFP)
- 23 **Neurological Diagnosis**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 23 **Special Rounds, Internal Medicine**

- 10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 23 **Virology and Interferon**
9-11 a.m. — Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)
- 23 **Cancer and the Nervous System**
1 p.m. — VA Hospital, East Orange
(Sponsored by AMNJ, CMDNJ, and VA Hospital)
- 23 **Ischemic Heart Disease**
9:30 a.m.-4 p.m. — Marriott Hotel, Saddle Brook
(Sponsored by AMNJ and American Heart Association, Bergen County Chapter)
- 23 **Radiologic Problems for Family Physicians**
8-9 a.m. — So. Ocean County Hospital, Manahawkin
(Sponsored by Burlington County Memorial Hospital and AAFP)
- 23 **Chemotherapeutic Therapy for Schizophrenia**
- 30 **Child Abuse and Behavioral Therapy**
1:30-3:30 p.m. — Christ Hospital, Jersey City
(Sponsored by Christ Hospital and AAFP)
- 23- **Annual Spring Scientific Tour**
- 26 **Ochsner Clinic, New Orleans**
(Sponsored by N.J. Chapter, American College of Surgeons and AAFP)
- 23 **Assault in Acutely Psychotic Manic-Depressive**
8-10 p.m. — Silver Lake Inn, Clementon
(Sponsored by Delaware Valley Study Group in Forensic Psychiatry and AMNJ)
- 24 **Pediatric Pulmonary Conference**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 24 **Marriage Counseling**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 24 **Fluids and Electrolytes**
5-6 p.m. — St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)
- 25 **Gestalt Therapy**
10 a.m.-4 p.m. — Sheraton Heights Hotel, Hasbrouck Heights
(Sponsored by Women's Counseling & Psychotherapy Service of Bergen County and AMNJ)
- 25 **Community Psychiatry**
1:30-2:30 p.m. — Trenton Psychiatric Hospital
Psychology
2:45-3:45 p.m. — Trenton Psychiatric Hospital
Forensic Psychiatry
4-5 p.m. — Trenton Psychiatric Hospital
(Sponsored by Trenton Psychiatric Hospital)
- 26 **Athletic Injuries**
9 a.m. — Valley Hospital, Ridgewood
(Sponsored by Valley Hospital)
- 28 **Acid-Base Balance**
5-6 p.m. — St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)
- 29 **Child Abuse**
8-10:30 p.m. — Travelodge, Somerset
(Sponsored by American Academy of Child Psychiatry and AMNJ)
- 30 **Hepatitis**
3 p.m. — Fair Oaks Hospital, Summit
(Sponsored by AMNJ and AAFP)
- 30 **Aortic Valvular Disease**
9-11 a.m. — Riverview Hospital, Red Bank
(Sponsored by Riverview Hospital and AAFP)
- 30 **Respiratory Virus Infections**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 30 **Clinical Hematology**
9:30 a.m.-4:30 p.m. — St. Michael's Medical Center, Newark
(Sponsored by AMNJ and St. Michael's Medical Center)
- 30 **The Neonate: Yesterday-Today-Tomorrow**
8:45 a.m.-3:30 p.m. — United Hospitals Medical Center, Newark
(Sponsored by United Hospitals Medical Center — Children's Hospital and AMNJ)
- 31 **Diagnosis and Treatment of Headache**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 31 **The Spleen and Splenectomy**
5-6 p.m. — St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)
- Apr.
- 1 **Community Psychiatry**
1:30-2:30 p.m. — Trenton Psychiatric Hospital
Psychology
2:45-3:45 p.m. — Trenton Psychiatric Hospital
Forensic Psychiatry
4-5 p.m. — Trenton Psychiatric Hospital
(Sponsored by Trenton Psychiatric Hospital)
- 1 **The Hospitalized Child**
- 15 **Childhood Rheumatoid Disease**
10 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 1 **Hypertension**
12 noon-1 p.m. — St. Mary's Hospital, Orange
(Sponsored by AMNJ and St. Mary's Hospital)
- 1 **Proper Use of Antibiotics**
8:30 a.m. — United Hospitals of Newark
(Sponsored by AMNJ and AAFP)

- 1 **Cardiology Conferences**
8 7:30-8:30 a.m. — St. Elizabeth Hospital, Elizabeth
15 (*Sponsored by St. Elizabeth Hospital and AAFP*)
22
29
- 2 **Advances in Orthopedic Surgery**
9 8:30-10:30 a.m. — N.J. Medical School, Newark
16 10 a.m.-12 noon — (Third Saturday Only)
23 (*Sponsored by CMDNJ and AMNJ*)
30
- 2 **Adolescent Medicine**
9 a.m.-2 p.m. — Morristown Memorial Hospital
(*Sponsored by CMDNJ-Office of Continuing Education, AMNJ and AAFP*)
- 4 **Depression in Adolescent Girl**
8-10 p.m. — 60 Melrose Place, Montclair
(*Sponsored by Essex Psychiatric Seminar and AMNJ*)
- 4 **Orthopedic Problems**
8 p.m. — Community Memorial Hospital, Toms River
(*Sponsored by AMNJ and AAFP*)
- 4 **Hodgkins Disease**
7 **Radio-Isotopes**
11 **Ovarian Neoplasms**
14 **Pulmonary Function Tests**
18 **Cardiac Catheterization**
21 **Swan-Ganz Catheter**
25 **Generalized Burn Care**
28 **Plastic Surgery and Skin Grafts**
5-6 p.m. — St. Francis Medical Center, Trenton
(*Sponsored by St. Francis Medical Center*)
- 4 **The Practice of Couples Group Therapy**
11 7-9 p.m. — Various locations
(*Sponsored by AMNJ and N.J. Center for Family Studies*)
- 4 **Basic Science for Surgeons**
11 3-4 p.m. — Martland Hospital, Newark
18 (*Sponsored by Dept. of Surgery, N.J. Medical School and AMNJ*)
25
- 5 **Community Medicine Lecture Series**
9:30 a.m. — Overlook Hospital, Summit
(*Sponsored by Overlook Hospital and AAFP*)
- 5 **Headache**
11 a.m. — Greystone Park Psychiatric Hospital
(*Sponsored by AMNJ and AAFP*)
- 5 **Chronic Hepatidities**
8-9 a.m. — Paterson General Hospital
(*Sponsored by Greater Paterson General Hospital and AMNJ*)
- 5 **So. N.J. Regional Chest Conference**
7:30-9:30 p.m. — John F. Kennedy Hospital, Stratford
(*Sponsored by N.J. Thoracic Society and AMNJ*)
- 5 **Surgery in Inflammatory Bowel Disease**
5-6 p.m. — Rutgers Medical School, Piscataway
(*Sponsored by CMDNJ and AMNJ*)
- 5 **Pediatric Chest Disease**
4-6 p.m. — St. Francis Hospital, Trenton
(*Sponsored by N.J. Thoracic Society and AMNJ*)
- 6 **Parkinson's Disease and Related Disorders**
9-11 a.m. — Middlesex General Hospital
(*Sponsored by Middlesex General Hospital and AAFP*)
- 6 **Special Rounds, Pathology**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(*Sponsored by St. Mary's Hospital*)
- 6 **Grand Rounds in Ob/Gyn**
13 2-4 p.m. — CMDNJ-N.J. Medical School, Newark
20 (*Sponsored by N.J. Medical School, Newark and*
27 *AMNJ*)
- 6 **Urology and Hypertension Seminar**
13 9-11 a.m. — West Jersey Hospital, Voorhees
(*Sponsored by West Jersey Hospital and AAFP*)
- 6 **New Concepts and Review of Internal Medicine**
20 1-3 p.m. — Bayonne Hospital
(*Sponsored by Bayonne Hospital and AMNJ*)
- 6 **Coronary Heart Disease**
1:30-5 p.m. — Hoffmann-La Roche, Inc., Nutley
(*Sponsored by Essex County Heart Association and AMNJ*)
- 6 **Selected Topics in Gastroenterology**
8-10 p.m. — St. Michael's Medical Center, Newark
(*Sponsored by N.J. Gastroenterology Society*)
- 6 **Chronic Schizophrenia**
1-2:30 p.m. — N.J. Medical School, Newark
(*Sponsored by CMDNJ and AMNJ*)
- 6 **Obstructive Uropathy**
9:15-10:15 a.m. — St. Barnabas Medical Center, Livingston
(*Sponsored by AMNJ and St. Barnabas Medical Center*)
- 6 **Specialized Techniques in Family Therapy**
7:30-9:30 p.m. — Seton Hall University, S. Orange
(*Sponsored by AMNJ and New Jersey Center for Family Studies*)
- 6 **Allergy and Immunology**
13 7:30-8:30 a.m. — Alexian Brothers Hospital, Elizabeth
20 (*Sponsored by Alexian Brothers Hospital and AAFP*)
27
- 6 **Cardiology Conferences**
20 4-6 p.m. — Rutgers Medical School, Piscataway
(*Sponsored by CMDNJ and AMNJ*)
- 6 **Anatomy for Surgeons**
20 4 p.m.-9 p.m. — Rutgers Medical School, Piscataway
27 (*Sponsored by CMDNJ and AMNJ*)
- 6 **Distinguished Lectures in Ob/Gyn**
8-9 p.m. — The Carriage Trade, East Orange
(*Sponsored by CMDNJ and AMNJ*)

- 7 Elizabeth Tri-Hospital Hematology Conferences**
21 8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 7 Basic Sciences and Clinical Applications**
14 3:30 p.m. — Burlington County Memorial Hospital,
21 Mount Holly
28 *(Sponsored by Burlington County Memorial Hospital and AAFP)*
- 7 Neurosurgical Conferences**
14 4-5 p.m. — VA Hospital, East Orange
21 *(Sponsored by CMDNJ, VA Hospital, East Orange,*
28 *and AMNJ)*
- 7 Hyperlipedemia**
 11:45 a.m.-12:45 p.m. — Kennedy Medical Center,
 Edison
(Sponsored by Kennedy Medical Center)
- 7 Advanced Psychiatric Study Group**
 8-10 p.m. — 312 Harding Drive, South Orange
(Sponsored by Group for Advanced Psychiatric Study
and AMNJ)
- 7 Medicolegal**
14 To be announced
21 Alexithymia
28 Electroconvulsive Therapy
 12 noon — Carrier Clinic, Belle Mead
(Sponsored by Carrier Clinic)
- 9 Fluids and Electrolyte Balance**
 10-11 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center & AAFP)
- 10 Intrauterine Growth Retardation**
 11 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center & AAFP)
- 12 New Developments in Psychiatry and Law**
 9-10:30 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center & AAFP)
- 12 Review and Update of Ob/Gyn**
 11:45 a.m.-12:45 p.m. — Kennedy Medical Center,
 Edison
(Sponsored by Kennedy Medical Center)
- 12 Acute and Chronic Hepatitis**
 12 noon — West Jersey Hospital, Northern Division,
 Camden
(Sponsored by West Jersey Hospital, University of
Penna. School of Medicine, and AAFP)
- 12 Collagen Disease**
 8 p.m. — Paul Kimball Hospital, Lakewood
(Sponsored by AMNJ and AAFP)
- 12 Echo-Cardiography**
 9 p.m. — Bayonne Hospital
(Sponsored by AMNJ and AAFP)
- 12 Effect of Medication of Laboratory Tests**
 8-10 p.m. — 646 Valley Road, Maplewood
(Sponsored by Journal Club of Greater Newark and
AMNJ)
- 13 Proper Use of Blood Gases**
 1 p.m. — Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)
- 13 Current Surgical Techniques, Breast Cancer**
 1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 13 Headache**
 11:30 a.m. — Rahway Hospital
(Sponsored by AMNJ and AAFP)
- 13 Cardiac Complications of Antidepressant Drugs and Major Tranquilizers**
 9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 13 Sedative Management for the General Practitioner**
 8:30 a.m.-4:15 p.m. — VA Hospital, East Orange
(Sponsored by AMNJ)
- 13 Endogenous Rhythms of Activity, CNS**
 8:30-10:30 p.m. — Guido's Restaurant, Hackensack
(Sponsored by North Jersey Psychiatric Society and AMNJ)
- 13 Special Rounds, Pediatrics**
 10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 13 Therapy of Ambulatory Patients Who Have Had Psychosis**
 1-2:30 p.m. — Marlboro Psychiatric Hospital
(Sponsored by Marlboro Psychiatric Hospital and AMNJ)
- 13 Update on Collagen Disease**
 10:30-12 noon — Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
- 14 Review Symposium — Malpractice**
 11:45 a.m.-12:45 p.m. — Kennedy Medical Center,
 Edison
(Sponsored by Kennedy Medical Center)
- 14 Drug Allergy**
 11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 14 Inflammatory Bowel Disease**
28 Multiple Sclerosis
 10:30 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 14 Elizabeth Tri-Hospital Endocrine Conferences**
28 8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 15 Community Psychiatry**
22 1:30-2:30 p.m. — Trenton Psychiatric Hospital
Mental Deficiency
 2:45-3:45 p.m. — Trenton Psychiatric Hospital
Forensic Psychiatry
 4-5 p.m. — Trenton Psychiatric Hospital
(Sponsored by Trenton Psychiatric Hospital)

- 15 **Scanning**
12 noon—Freehold Area Hospital
(Sponsored by AMNJ and AAFP)
- 16 **Emergency Medicine**
8:50 a.m.-2:45 p.m.—Ramada Inn, East Brunswick
(Sponsored by Philippine-American Medical Society and AMNJ)
- 17 **Seminar in Medical Humanism**
8:30-10 p.m.—Bergen Pines County Hospital, Paramus
(Sponsored by Bergen Pines County Hospital, Bergen County Medical Society and AMNJ)
- 19 **Cardiac Arrhythmias**
12 noon—St. Mary's Hospital, Orange
(Sponsored by AMNJ and AAFP)
- 19 **Recent Advances in Cardiology**
8:30-9:30 p.m.—Irvington General Hospital
(Sponsored by Irvington General Hospital and AMNJ)
- 20 **Corneal and Recurrent Erosions**
5-8:30 p.m.—Hunterdon Medical Center
(Sponsored by Hunterdon Medical Center and AMNJ)
- 20 **Obesity and Hypoglycemia**
9 a.m.-3:45 p.m.—Rutgers Medical School, Piscataway
(Sponsored by American Diabetes Association, N.J. Affiliate, and AMNJ)
- 20 **Common Medical Problems**
8-9 a.m.—So. Ocean County Hospital, Manahawkin
(Sponsored by Burlington County Memorial Hospital and AAFP)
- 20 **Estrogen Replacement in Menopause**
1 p.m.—Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)
- 20 **Leukemia Patient**
1-5 p.m.—Holiday Inn, Saddle Brook
(Sponsored by Leukemia Society of America, N.J. Chapter, and AMNJ)
- 20 **Child Abuse and Neglect**
1 p.m.—Trenton Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
- 20 **Pulmonary Pathology in Connective Tissue Disease**
11:30 a.m.-12:30 p.m.—V.A. Hospital, East Orange
(Sponsored by V.A. Hospital, East Orange)
- 20 **New Cardiac Drugs**
9-11 a.m.—Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 20 **Special Rounds, General Surgery and Specialties**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 20 **New Frontiers in Psychiatry**
1-2:30 p.m.—N.J. Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 21 **Insect Allergy**
11 a.m.-12 noon—United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 21 **Carcinoma of Lung**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 21 **Diagnostic Approaches to the Ischemic Lower Extremity**
5-6:30 p.m.—Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
- 21 **Postgraduate Symposia in Surgery**
7:30-8:30 a.m.—West Jersey Hospital, Voorhees
(Sponsored by West Jersey Hospital, University of Pennsylvania and AAFP)
- 21 **No. N.J. Regional Chest Conference**
7:30-9:30 p.m.—Riverside General Hospital, Secaucus
(Sponsored by New Jersey Thoracic Society and NAMNJ)
- 26 **Endotoxic Shock**
12 noon—Hospital Center at Orange
(Sponsored by AMNJ and AAFP)
- 26 **Gastrointestinal Bleeding**
8 p.m.—Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
- 26 **Surgical Treatment of Renal Vascular Hypertension**
8-10 p.m.—Englewood Mens' Club, Englewood
(Sponsored by The Englewood Surgical Society and AMNJ)
- 26 **Hyperlipidemia**
12 noon—West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 27 **Analytical Psychiatrics**
1:30-3:30 p.m.—Christ Hospital, Jersey City
(Sponsored by Christ Hospital and AAFP)
- 27 **Radiologic Problems for Family Physicians**
8-9 a.m.—So. Ocean County Hospital, Manahawkin
(Sponsored by Burlington County Memorial Hospital and AAFP)
- 27 **Chemotherapy in Treatment of Breast Cancer**
12 noon-1 p.m.—Englewood Hospital, Englewood
(Sponsored by Englewood Hospital and AMNJ)
- 27 **Emotional Crises in Practice**
9-11 a.m.—Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 27 **Special Rounds, Internal Medicine**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 27 **Neonatal Infections**

- 10:30 a.m.-12 noon—Passaic General Hospital
(*Hahnemann Medical College and AAFP*)
- 27 **Lung Cancer**
1:30-3 p.m.—St. Mary's Hospital, Passaic
(*Sponsored by AMNJ and AAFP*)
- 28 **Pediatric Pulmonary Conference and Case Presentations**
11 a.m.-12 noon—United Hospitals of Newark
(*Sponsored by Children's Hospital of Newark and CMDNJ*)
- 28 **Use and Abuse of Diuretics**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(*Sponsored by Kennedy Medical Center*)
- May
- 2 **Emergency Medicine**
8 p.m.—Community Memorial Hospital, Toms River
(*Sponsored by AMNJ and AAFP*)
- 2 **A Learning-Disabled Adolescent**
8-10 p.m.—1046 South Orange Avenue, Short Hills
(*Sponsored by Essex Psychiatric Seminar and AMNJ*)
- 2 **Basic Science for Surgeons**
9 3-4 p.m.—Martland Hospital, Newark
16 (*Sponsored by N.J. Medical School and AMNJ*)
23
- 3 **Community Medicine Lecture Series**
9:30 a.m.—Overlook Hospital, Summit
(*Sponsored by Overlook Hospital and AAFP*)
- 3 **Cerebral-Vascular Disease**
11 a.m.—Greystone Park Psychiatric Hospital
(*Sponsored by AMNJ and AAFP*)
- 3 **Childhood Injuries**
5-6 p.m.—Rutgers Medical School, Piscataway
(*Sponsored by CMDNJ and AMNJ*)
- 3 **Chronic Hepatidities**
10 8-9 a.m.—Paterson General Hospital
17 (*Sponsored by Paterson General Hospital and AMNJ*)
24
31
- 4 **Thanatology**
1 p.m.—Christ Hospital, Jersey City
(*Sponsored by AMNJ and AAFP*)
- 4 **Sports Medicine**
11:30 a.m.—Rahway Hospital
(*Sponsored by AMNJ and AAFP*)
- 4 **Low Back Pain**
9-11 a.m.—Middlesex General Hospital
(*Sponsored by Middlesex General Hospital and AAFP*)
- 4 **Glomerulonephritis**
9:15-10:15 a.m.—St. Barnabas Medical Center, Livingston
(*Sponsored by AMNJ and St. Barnabas Medical Center*)
- 4 **Special Rounds, Pathology**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(*Sponsored by St. Mary's Hospital*)
- 4 **Psychiatric Rehabilitation**
1-2:30 p.m.—N.J. Medical School, Newark
(*Sponsored by CMDNJ and AMNJ*)
- 4 **Allergy and Immunology**
11 7:30-8:30 a.m.—Alexian Brothers Hospital, Elizabeth
18 (*Sponsored by Alexian Brothers Hospital and AAFP*)
25
- 4 **Anatomy for Surgeons**
11 4 p.m.-9 p.m.—Rutgers Medical School, Piscataway
18 (*Sponsored by CMDNJ and AMNJ*)
25
- 4 **Cardiology Conferences**
18 4-6 p.m.—Rutgers Medical School, Piscataway
(*Sponsored by CMDNJ and AMNJ*)
- 4 **Distinguished Lectures in Ob/Gyn**
8-9 p.m.—The Carriage Trade, East Orange
(*Sponsored by CMDNJ and AMNJ*)
- 4 **New Concepts and Review of Internal Medicine**
18 1-3 p.m.—Bayonne Hospital
(*Sponsored by CMDNJ and AMNJ*)
- 4 **Grand Rounds in Obstetrics and Gynecology**
11 2-4 p.m.—New Jersey Medical School, Newark
18 (*Sponsored by CMDNJ and AMNJ*)
25
- 5 **Fluid and Electrolyte Balance**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(*Sponsored by Kennedy Medical Center*)
- 5 **Seminar in Medical Humanism**
8:30-10 p.m.—Bergen Pines County Hospital, Paramus
(*Sponsored by Bergen Pines County Hospital, Bergen County Medical Society and AMNJ*)
- 5 **Veterinary Allergy**
11 a.m.-12 noon—United Hospitals of Newark
(*Sponsored by Children's Hospital of Newark and CMDNJ*)
- 5 **Neurosurgical Conferences**
12 4-5 p.m.—VA Hospital, East Orange
19 (*Sponsored by CMDNJ, VA Hospital, East Orange, and AMNJ*)
26
- 5 **Elizabeth Tri-Hospital Hematology Conferences**
19 8-9 a.m.—St. Elizabeth Hospital, Elizabeth
(*Sponsored by St. Elizabeth Hospital and AAFP*)
- 5 **Basic Sciences and Clinical Applications**
12 3:30 p.m.—Burlington County Memorial Hospital, Mount Holly
19 (*Sponsored by Burlington County Memorial Hospital and AAFP*)

- 286

- 16 Diagnosis and Management of Non-Hodgkins Lymphoma**
12 noon-1 p.m. — Overlook Hospital, Summit
(Sponsored by Overlook Hospital and AMNJ)
- 17 Tuberculosis**
12 noon — St. Mary's Hospital, Orange
(Sponsored by AMNJ and AAFP)
- 18 Common Medical Problems**
- 25 Common Radiologic Problems for Family Physicians**
8-9 a.m. — So. Ocean County Hospital, Manahawkin
(Sponsored by Burlington County Memorial Hospital and AAFP)
- 18 What's New in Office Gynecology?**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 18 Special Rounds, General Surgery and Specialties**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 18 Pharmacology of Sleep**
1-2:30 p.m. — N.J. Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 19 Atopic Dermatitis**
11 a.m.-12 noon — United Hospitals of Newark
(Children's Hospital of Newark and CMDNJ)
- 19 Outpatient Management of Pulmonary Tuberculosis**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 19 Cellular Engineering in Medicine**
5-6:30 p.m. — Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
- 19 Postgraduate Symposia in Surgery**
7:30-8:30 a.m. — West Jersey Hospital, Voorhees
(Sponsored by West Jersey Hospital, University of Pennsylvania and AAFP)
- 19 Marriage: Myth and Reality**
8:30-10:30 p.m. — Hackensack Hospital
(Sponsored by N.J. Psychoanalytic Society and AMNJ)
- 20 Diabetes**
12 noon — Freehold Area Hospital
(Sponsored by AMNJ and AAFP)
- 20 Duodenal-Pancreatico Catheterization**
9-10 a.m. — St. Francis Hospital, Trenton
(Sponsored by Hahnemann Medical College and AAFP)
- 24 Thanatology**
12 noon — Hospital Center at Orange
(Sponsored by AMNJ and AAFP)
- 24 Obesity, Prevention and Control**
12 noon — West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 24 Secretory Immunoglobulins in Diagnosis of GI Carcinoma**
8-10 p.m. — Englewood Mens' Club
(Sponsored by the Englewood Surgical Society)
- 24 Bleeding Diseases**
8 p.m. — Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
- 25 Proper Use of Blood Gases**
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 25 Headache**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 25 Special Rounds, Internal Medicine**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 25 Pneumonia: Viral and Bacterial**
10:30-12 noon — Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
- 26 Human Territoriality**
12 noon — Carrier Clinic, Belle Mead
(Sponsored by Carrier Clinic)
- 26 Pediatric Pulmonary Conference and Case Presentations**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 26 Preventive Measures in Heart Disease**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- June**
- 1 Tuberculosis — Outpatient Treatment**
1 p.m. — Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)
- 1 Special Rounds, Pathology**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 1 Anatomy for Surgeons**
4-9 p.m. — Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)
- 1 Allergy and Immunology**
- 8 7:30-8:30 a.m. — Alexian Brothers Hospital, Elizabeth**
(Sponsored by Alexian Brothers Hospital and AAFP)
- 15 22**
- 1 Distinguished Lectures in Ob/Gyn**
8-9 p.m. — The Carriage Trade, East Orange
(Sponsored by CMDNJ and AMNJ)

- 2 **Advanced Psychiatric Study Group**
8-10 p.m. — 312 Harding Drive, South Orange
(Sponsored by Group for Advanced Psychiatric Study and AMNJ)
- 2 **Elizabeth Tri-Hospital Hematology Conferences**
16 8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 2 **Neurosurgical Conferences**
9 4-5 p.m. — VA Hospital, East Orange
16 (Sponsored by CMDNJ, VA Hospital, East Orange,
23 and AMNJ)
30
- 2 **Pulmonary Function Tests**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 2 **So. N.J. Regional Chest Conference**
7:30-9:30 p.m. — John F. Kennedy Hospital, Stratford
(Sponsored by New Jersey Thoracic Society and AMNJ)
- 2 **Central N.J. Regional Chest Conference**
4-6 p.m. — Rutgers Medical School, Piscataway
(Sponsored by New Jersey Thoracic Society and AMNJ)
- 3 **Psychiatry-Medical Surgical Emergencies**
8:30 a.m. — United Hospitals of Newark
(Sponsored by AMNJ and AAFP)
- 3 **Cardiology Conferences**
10 7:30-8:30 a.m. — St. Elizabeth Hospital, Elizabeth
17 (Sponsored by St. Elizabeth Hospital and AAFP)
24
- 4 **Advances in Orthopedic Surgery**
11 8:30-10:30 a.m. — N.J. Medical School, Newark
18 10 a.m.-12 noon — (Third Saturday Only)
25 (Sponsored by CMDNJ and AMNJ)
- 6 **Non-Specific Urethritis**
8 p.m. — Community Memorial Hospital, Toms River
(Sponsored by AMNJ and AAFP)
- 6 **An Enuretic Girl**
8-10 p.m. — 9 Marquette Road, Upper Montclair
(Sponsored by Essex Psychiatry Seminar and AMNJ)
- 7 **Chronic Hepatidities**
14 8-9 a.m. Paterson General Hospital
(Sponsored by Paterson General Hospital and AMNJ)
- 7 **Biology of Surgical Infection**
5-6 p.m. — Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)
- 7 **Arthritis**
11 a.m. — Greystone Park Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
- 8 **Special Rounds, Pediatrics**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 8 **Endotoxic Shock**
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 8 **Management of Arrhythmias**
10:30-12 noon — Passaic General Hospital
(Hahnemann Medical College and AAFP)
- 8 **Annual Meeting New Jersey Thoracic Society**
Rutgers Medical School, Piscataway
(Sponsored by New Jersey Thoracic Society)
- 8 **Hyperkinetic Syndrome of Childhood**
15 **Modern Aspect of Drug Abuse**
22 **Psychopharmacology and Psychiatric Disorders**
29 **Forensic Psychiatry**
1:30-3:30 p.m. — Christ Hospital, Jersey City
(Sponsored by Christ Hospital and AAFP)
- 8 **Evolution of the State Hospital Psychiatrist**
1-2:30 p.m. — Marlboro Psychiatric Hospital
(Sponsored by Marlboro Psychiatric Hospital and AMNJ)
- 9 **Proper Use of Blood Gas**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 9 **Elizabeth Tri-Hospital Endocrine Conferences**
23 8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 14 **Chronic Pancreatic Disease**
12 noon — West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 14 **Endocrine Changes in Menopause**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 14 **Pacemakers**
8 p.m. — Paul Kimball Hospital, Lakewood
(Sponsored by AMNJ and AAFP)
- 14 **Allergy**
9 p.m. — Bayonne Hospital
(Sponsored by AMNJ and AAFP)
- 15 **Adult Respiratory Distress Syndrome**
11:30 a.m.-12:30 p.m. — V.A. Hospital, East Orange
(Sponsored by East Orange V.A. Hospital)
- 15 **Special Rounds, General Surgery and Specialties**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 15 **Transcultural Psychiatry**
1-2:30 p.m. — New Jersey Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 15 **Common Medical Problems**
22 **Radiologic Problems for Family Physicians**

- 8-9 a.m.—So. Ocean County Hospital, Manahawkin
(Sponsored by Burlington County Memorial Hospital and AAFP)
- 16 Postgraduate Symposia in Surgery**
7:30-8:30 a.m.—West Jersey Hospital, Voorhees
(Sponsored by West Jersey Hospital, University of Pennsylvania and AAFP)
- 16 Duodenal Ulcer Disease**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 16 Current Concepts of Addiction**
5-6:30 p.m.—Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
- 17 Thyroid Diseases**
12 noon—Freehold Area Hospital
(Sponsored by AMNJ and AAFP)
- 20 Status Asthmaticus**
10 a.m.—Monmouth Medical Center
(Sponsored by AMNJ and AAFP)
- 21 Hypertension**
12 noon—St. Mary's Hospital, Orange
(Sponsored by AMNJ and AAFP)
- 22 Arterial Blood Gases**
- 10:30-12 noon—Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
- 22 Hemorrhagic Shock**
1:30-3 p.m.—St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 22 Special Rounds, Internal Medicine**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 23 Psychosomia—A Medical Diagnosis**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 28 Outpatient Management of Tuberculosis**
8 p.m.—Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
- 28 Treatment of Rheumatoid Arthritis**
12 noon—West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 28 Dysentery in India**
8-10 p.m.—Englewood Mens' Club, Englewood
(Sponsored by Englewood Surgical Society and AMNJ)

Third Annual Governor's Conference

Saturday, May 14, 1977

Government and Medicine: Local, State, and National Problems

Welcome: John S. Madara, M.D., President, MSNJ

Keynote Remarks: Hon. Brendan T. Byrne, Governor of New Jersey

Remarks: Richard E. Palmer, M.D., President, AMA

Local Problems

Hon. Paul Jordan, M.D., Mayor of Jersey City

State Problems

Gerald J. Reilly, Director, Medical Assistance and Health Services, State of New Jersey

Federal Problems

Charles Edwards, M.D., Vice-President, Becton-Dickinson, Inc.

OBITUARIES

Dr. Frank J. T. Aitken

On January 8, Frank J. T. Aitken, M.D., a member of our Cumberland County component, died at his home in Stowe Creek Township. Born in Philadelphia and graduated from Hahnemann Medical College in 1927, Dr. Aitken took graduate work in pathology at Providence (R.I.) City Hospital and at St. Luke's and Children's Hospitals in Philadelphia. He came to Bridgeton in 1930 and accepted an appointment in the Department of Pathology at Bridgeton Hospital. The following year he became a member of the medical staff and pursued graduate work in internal medicine at Hahnemann and at the Leahy Clinic in Boston. Dr. Aitken had been active in his county medical society, having served a term as president, and with the Cumberland County Heart Association of which he had been a member of the board of directors and president. During World War II he served with the Medical Department of the United States Army in both the European and Pacific theaters. Dr. Aitken was 73 years old at the time of his death.

Dr. Louis A. Amdur

Word has just been received of the death on November 25, 1976 of Louis Amdur, M.D., an affiliate member of the Hudson County Medical Society who formerly practiced in Jersey City. Born in 1905, Dr. Amdur graduated from Hahnemann Medical College, class of 1932, and went on to take a residency in ophthalmology at Columbia College of Physicians and Surgeons, becoming board certified in his chosen field. He had been on the staff at Christ Hospital and at the Medical Center in Jersey City. Dr. Amdur was a member of the American and New Jersey Associations of Ophthalmology and Otolaryngology. In 1973 he retired to Coral Gables, Florida where he was living at the time of his death.

Dr. Abraham Apter

Abraham H. Apter, M.D., one of Passaic County's senior members, died on January 19 at

Barnert Memorial Hospital in Paterson where he had been a member of the staff. A graduate of Long Island School of Medicine in 1929, Dr. Apter took graduate work at New York Psychoanalytic Institute and after service in the Medical Department of the United State Army during World War II, he came to Paterson to practice psychiatry, later moving his offices to Fair Lawn. He was a Fellow of the American Psychiatric Association and of the American Association for the Advancement of Science. Dr. Apter was 75 years old at the time of his death.

Dr. Joseph J. Bono

Joseph J. Bono, M.D., formerly an anesthetist at St. Mary's Hospital in Passaic, died in that hospital on December 28, 1976. A native of Sicily, born in 1902, Dr. Bono earned his medical degree in 1928 at Laval University and took a residency in anesthesiology at the Jersey City Medical Center. Before his appointment at St. Mary's Hospital he had been on the staff at Englewood hospital and at Holy Name Hospital in Teaneck. Dr. Bono retired five years ago and was presently living in Wayne. He was a member of the American Society of Anesthesiologists.

Dr. Louis Chaiken

One of the senior members of the Mercer County Medical Society, Louis H. Chaiken, M.D., of Pennington, died on January 7 at the age of 76. Born in Brooklyn, New York and graduated from Long Island College of Medicine, class of 1925, Dr. Chaiken pursued graduate work in urology at New York Postgraduate School and at clinics in Austria, at the conclusion of which he came to Elizabeth to establish a practice. During World War II, Dr. Chaiken volunteered with the British Emergency Medical Service and was stationed in London, until accepting a commission in the Medical Department of the United States Army. He had been senior attending urologist at Elizabeth General Hospital and director of the Venereal Disease Clinic of the Board of Health of the City of Elizabeth. Dr. Chaiken retired in 1963 and moved to Princeton and more recently to Pennington.

Dr. Tiacson Co

On New Year's Day, Tiacson Co, M.D., a member of the Somerset County Medical Society, died at the untimely age of 37. Born in the Philippines, Dr. Co received his medical degree from Far Eastern University in 1965 and came to Brooklyn, New York for internship and residency in internal medicine. He had been on the staffs at the Muhlenberg Hospital in Plainfield and the Martland Medical Center in Newark.

Dr. Walter A. Crist

On January 20 Walter A. Crist, M.D., a member of the Camden County component who practiced in the Camden-Collingswood area for over fifty years, died at Cooper Medical Center. Born at the turn of the century and graduated from Jefferson Medical College in 1923, Dr. Crist earned board certification in internal medicine (cardiovascular diseases) and had been director of the Heart Station at Cooper and senior attending in the department of medicine. He was affiliated also with Jefferson Hospital as an associate in medicine. He was a Fellow of the American College of Physicians, and had served a term as president of the Camden County Medical Society. During World War II, Dr. Crist saw active duty in the department of medicine of the United States Navy, earning designation as chief of medicine at the U.S. Naval Hospital in Charleston, South Carolina.

Dr. Paul J. Finegan

A well-known orthopedic surgeon in Mercer County, Paul J. Finegan, M.D., died at St. Francis Medical Center in Trenton on January 24 after a long illness. Born in 1903 and graduated from the University of Pennsylvania School of Medicine, class of 1929, Dr. Finegan pursued a career in orthopedic surgery and became board certified in his chosen field. He was a Fellow of the American Academy of Orthopedic Surgery and its New Jersey affiliate, of which he served a term as president. He had been on the staff at St. Francis Medical Center for many years, ultimately becoming chief of the department of orthopedic surgery. He for-

merly had been a member of the New Jersey National Guard and saw active duty during World War II in the Department of Medicine of the Army of the United States. Dr. Finegan had been retired from active practice since 1970.

Dr. Emerson F. Hird

At the grand age of 93, Emerson Freeman Hird, M.D., formerly of Bound Brook, died on January 1 in East Longmeadow, Massachusetts where he lived in retirement. Graduated from Boston University College of Medicine in 1910, Dr. Hird practiced family medicine for over fifty years, first in Trenton and since 1913 in Bound Brook. He had been on the staffs at Muhlenberg Hospital in Plainfield and Somerset Hospital, Somerville, and served a term as president of his county medical society (Somerset). In 1962 he was honored by the Chamber of Commerce of Bound Brook as "Man of the Year."

Dr. Antonio O. Hubert

We have learned of the death on December 20, 1976, in St. Johnsbury, Vermont, of Antonio O. Hubert, M.D. A native of Quebec, and a graduate of Montreal University Medical School in 1924, Dr. Hubert had practiced internal medicine in Rockaway for many years. While there he was affiliated with St. Clare's Hospital in Denville and Dover General Hospital. Dr. Hubert was 80 years old at the time of his death.

Dr. Daniel V. Manahan

Daniel V. Manahan, M.D., formerly from Monmouth County, died on January 10 at his home in Springfield, Vermont, where he had been residing for the past ten years. A native of New Jersey, born in 1897, Dr. Manahan was graduated from Columbia University's College of Physicians and Surgeons in 1924 and came to Red Bank to establish a practice in general medicine, which he maintained until retirement in 1966. He had been affiliated with the River-view Hospital in Red Bank.

Dr. Carl A. Maxwell

Word has just been received of the death on September 24, 1976 of Carl A. Maxwell, M.D. Born in 1910, he received his medical degree from the University of California Medical School in 1936 and went on to pursue studies in orthopedic surgery at Tulane University. Dr. Maxwell was board certified in his specialty and was a Fellow of the American College of Surgeons and of the International College of Surgeons. He was on the staff at the Veterans Administration Hospital in Lyons, and also was associated with the Kessler Institute in West Orange and the Muhlenberg Medical Center in Bethlehem, Pennsylvania. Dr. Maxwell had been chief of the orthopedic department of the Warren Hospital in Phillipsburg. He was active in county medical affairs and had served a term as president of the Warren County Medical Society. During the 1950's he was as a member of the New Jersey Rehabilitation Commission.

Dr. John G. Schmidt

Word has just been received of the death on December 15, 1976, of John G. Schmidt, M.D.,

a member of our Sussex County component. A graduate of Harvard Medical School, class of 1930, Dr. Schmidt practiced general surgery and was board certified in that specialty. He had been on the staff at Franklin Hospital in Franklin where he was chief of the department of surgery. He also was affiliated with the surgical department at New York Hospital in New York City and was assistant professor of surgery at Cornell Medical School. During World War II Dr. Schmidt served for three and a half years with the Medical Department of the United States Army. He was 74 years old at the time of his death.

Dr. Charles A. Wallack

We have just learned of the death on December 10, 1976, of one of Essex County's senior members, Charles A. Wallack, M.D., at Beth Israel Medical Center in Newark. A graduate of the University of Maryland School of Medicine in 1929, Dr. Wallack practiced general medicine and surgery in Newark for 45 years. He had been on the staff in the department of surgery at Beth Israel Medical Center. He was 74 years old at the time of his death.

BOOK REVIEW

Understanding Arthritis and Rheumatism. M.I.V. Jaysan and A. & L. J. Dixon. New York, Dell, 1976. Pp. 234. Illustrated. (Paperback — \$1.75)

Even if we take with a grain of salt the Arthritis Foundation's contention that "over 50 million Americans have some form of arthritis," it can be accepted that occasional rheumatic symptoms are nearly ubiquitous and significant arthritis is common. Books about arthritis and rheumatism are therefore almost as popular as cookbooks although they may preach only folk medicine or quack diets. Useful advice about arthritis may be obtained from the Arthritis Foundation (Westfield) or from a thoughtful, fact-filled book such as *Understanding Arthritis and Rheumatism*.

Drs. Jaysan and Dixon are British rheumatologists and this inexpensive paperback was originally published in England although a helpful "resource directory" has been adapted for the American reader. All significant forms of rheumatic disease are covered from rheumatoid and juvenile rheuma-

toid arthritis to painful feet and soft tissue rheumatism. Treatment is discussed from immunosuppressive drugs to acupuncture and herbalism. Exercises are diagramed. The authors are responsible throughout. Any physician should feel comfortable recommending this book to a patient who is seeking information about rheumatic problems.

Lonnie B. Hanauer, M.D.

The Medical School Admission Adviser. Marvin Fogel and Mart Walker. New York, Hawthorn Books, 1976. Pp. 196 (Paperback — \$5.95)

It is indeed unfortunate that, due either to communication difficulties or to extensive anxieties concerning the process, candidates for admission to medical school find the need to search out assistance from sources external to the admissions offices. The book by Drs. Fogel and Walker more than adequately covers the subject; however, most of this material should be known to an alert and well-motivated candidate without seeking out additional assistance in such volumes.

The authors, drawing on their long experience in the admissions process of a United States medical school, are straightforward in their presentation of pertinent information and they have organized the material in an orderly manner. They are to be commended for the comprehensive

manner in which they approached the subject and the care with which subjects are reviewed, questions answered, and guidance provided to the candidate. A summary review is presented of medicine as a career, the difficulties in obtaining admission and in the admissions process, undergraduate courses, performance, and motivation. Special sections are provided concerning minority admissions, women in medicine, and the application of candidates to foreign medical schools.

As a reference volume for the new and uninitiated guidance counselor at undergraduate colleges, I believe this volume would be of great interest and assistance. However, I would like to see a meaningful relationship develop between the medical schools of the candidate's primary choice rather than dependence upon a single manual which, obviously, cannot include the many differences and interests of individual schools.

Stanley S. Bergen, Jr., M.D.

Woman's Body, Woman's Right (A Social History of Birth Control in America). Linda Gordon. New York, Grossman/Vikings, 1976. Pp. 479. (\$12.50)

This book intends to trace the influence of birth control as a social issue and social movement in America. The author surveys the movement from its beginning to the present. It is both a historical and a political work about birth control, sexuality, and feminism. Linda Gordon tries to demonstrate that birth control has always been primarily a matter of social and political acceptability rather than of medicine or technology.

The doctors' self-exalted image as the healer and teacher of woman comes under close examination, and fails to hold true. The author demonstrates that doctors over the centuries, with few exceptions, simply have molded their morals, ideals, and the degree of compassion shown to the prevalent social and political movements.

It is a well written, well documented, and interesting book which explores feminism, sexuality, and the politics of reproduction in a very complete fashion.

Marco Antonio Pelosi, M.D.

Current Obstetric and Gynecologic Diagnosis and Treatment. Rolph C. Benson, M.D. Los Altos, California, Lange, 1976. Pp. 912. Illustrated. Saffbook — \$16

Professor Benson has assembled a formidable group of academicians and clinicians and has created a comprehensive textbook in obstetrics and gynecology that should prove invaluable to the medical student, intern, and resident physician, as well as the practicing physician who requires a ready reference for the latest information and/or who is preparing for certification or re-certification. This first edi-

tion, which should be followed by subsequent editions, represents a suitable substitute for Benson's *Handbook* which had outgrown itself.

Although the title of this textbook includes the word "treatment," the paragraphs entitled "Treatment" or "Management" present material necessarily succinct. Therefore, the family physician, without readily available consultation, could not and should not manage his patients on the basis of this material. As a case in point, the family physician who is frequently asked to provide contraceptive management for a significant percentage of the population, should be wary of following the advice of Professor Tatum and should not agree readily to the insertion of an IUD in a nulligravida patient. It is probably impossible to edit such an all-inclusive textbook such as this without overlooking or possibly ignoring minor errors. Sporostacin, which has been withdrawn from the market, should have been omitted as a therapeutic agent for candidiasis. There is still no justification for the "caution" against alkaline douches for candidiasis.

The book is well-written, clearly presented, and thus highly recommended.

Jerome Abrams, M.D.

The High-Energy Diet for Dynamic Living. Mox M. Novich and Ted Koufman. New York, Grosset and Dunlop, 1976. Pp. 222. (\$10)

The eye-catching title, together with the added enticement "Super Nutrition for People on the Go," might lead one to assume this volume was another of the growing multitude of plans promising instant good health through a variety of dietary regimens. Not so! This book is written to serve as a basic guide to sound nutrition combined with a realistic exercise program for persons who work under constant stress.

The "High-Energy Diet" is similar to the "prudent diet" recommended by many nutrition specialists. Caloric intake is approximately 10 percent less than the RDA; fat intake is limited to 25 to 30 percent of total calories with a high P/S ratio. Protein foods suggested are low in saturated fats and cholesterol. The recipes presented are tasty and should help in making the plan appetizing.

Nutrient quality of foods—spending food calories wisely—is stressed throughout the book. The success of the plan, as in most endeavors, depends on self-motivation, which the authors clearly recognize. The sections on metabolism and nutrient needs are written in an accurate, interesting, easy-to-read style.

The appendix supplies the 1974 RDAs, food value tables, a bibliography, recipe index, and general index.

Nancy B. Crutchfield, MPH

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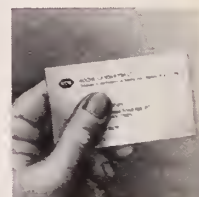


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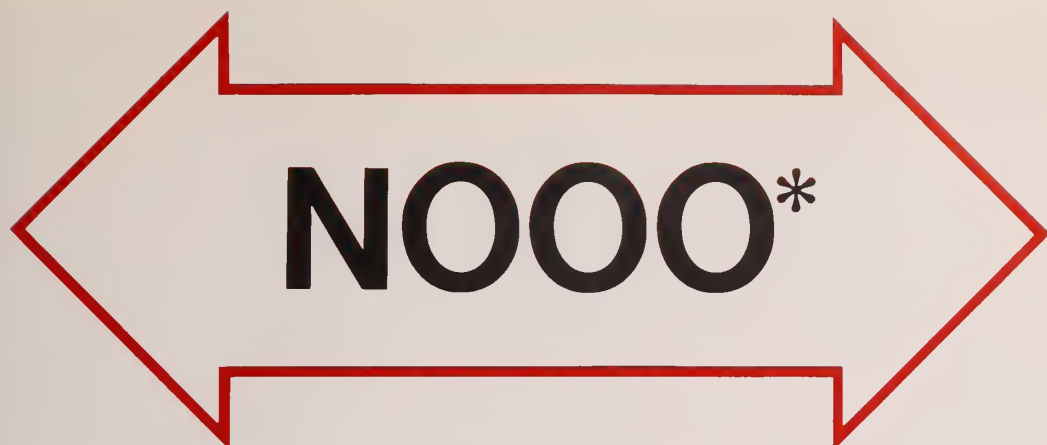
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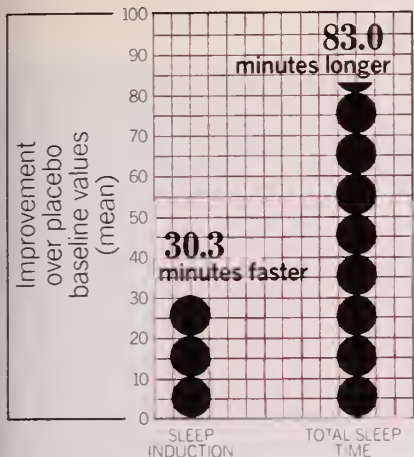
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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

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Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

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REFERENCES:

1. Frost JD Jr: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ
2. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ
3. Robinson DS, Amidon EL: Interaction of benzodiazepines with warfarin in man, in *The Benzodiazepines*, edited by Garattini S, Mussini E, Randall LO. New York, Raven Press, 1973, p. 641

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EDITORIALS

Come to Atlantic City

The Medical Society of New Jersey is returning to the famed beach resort, Atlantic City, for the 211th Annual Meeting, May 14 to 17 at Chalfonte-Haddon Hall. The program which promises to be worth everyone's time includes the Third Annual Governor's Conference where speakers of note will discuss government and medicine at the local, state, and national level—a critical issue.

More than ever, it behooves each of us to “get involved.” All members of the Society are urged to come to reference committee meetings, where the real work occurs and where your opinion can be heard.

A.K.

Implement the Guidelines

A seventy-year-old diabetic, with a history of at least two strokes and residual brain damage, developed gangrene of his leg, which produced an intolerably painful and toxic state. After a palliative above-knee amputation, the patient developed cardio-pulmonary arrest, ventricular tachycardia and shock, which responded to endotracheal intubation, ventilatory assistance, cardioversion, and multiple drugs. The subsequent course led to pneumothorax, atelectasis, pyogenic bronchitis, and bronchopneumonia which were treated by tracheotomy, tracheo-bronchial aspirations, multiple chest tubes and underwater drainage, MAI ventilatory assistance, antibiotics, insulin, intravenous fluids, and intensive nursing care. After a few days of aphonic consciousness, the patient had another episode of cardio-pulmonary arrest, ventricular tachycardia, circulatory collapse, and coma. He was cardioverted once more, but then required complete life support, including tubes in virtually every natural orifice and a few man-made openings.

At this point (after a total hospital cost of

\$10,217.37, not counting physicians' services) the patient's seventy-year-old wife and all other adult family members requested that the “life-supporting” machines and treatment modalities be removed. Before the implementation of this request—with which all the physicians and nurses on the case concurred—the hospital administrators were called. After embarrassed protestations, the physician was referred to a junior lawyer in the hospital's legal firm. His major contribution was a question—was an EEG done?

The facts are that this hospital staff and administration were no better prepared to deal with this difficult situation—which is becoming more prevalent and which lurks in the ICU's and CCU's of every New Jersey hospital at all times—than they were before the infamous Karen Ann Quinlan case.

A procedure has now been defined: “Guidelines for Health Care Facilities to Implement Procedures Concerning the Care of Comatose Non-Cognitive Patients.” (p. 368, this issue) These guidelines, which do not carry the force of law, were designed “to assist and guide the medical profession and the governing authorities of health care facilities . . . of the procedures required by the New Jersey Supreme Court for cases similar to that of Karen Ann Quinlan.”

The guidelines were developed by representatives of The Medical Society of New Jersey, the Association of Osteopathic Physicians and Surgeons of New Jersey, the New Jersey Hospital Association, and the Attorney General's office, and were endorsed by the State Board of Medical Examiners and the New Jersey State Department of Health.

The essence of the guidelines are as follows:

1. The Board of Trustees of the hospital (or responsible governing authority of the facility) shall select and designate a group of physicians to serve for a specific term as a Prognosis Committee.
2. The Prognosis Committee shall include physicians from the institution whose disciplines are

general surgery, medicine, neurosurgery or neurology, anesthesiology, and pediatrics (if a child is considered). Two physicians from any appropriate disciplines who are not staff members of the institution are also to be included. Board-certified specialists are preferred. Attending or treating physicians on the case are excluded from membership.

3. The Prognosis Committee will meet on request of the attending physician or family (or guardian, where required by law) in a case where the physician concludes that there is no reasonable possibility that the patient will emerge "from a comatose condition to a cognitive, sapient state."

4. The Prognosis Committee shall review all relevant patient records, interview nursing personnel and other professionals who have pertinent facts about the case. One or more members of the committee "will conduct a complete examination of the patient."

5. The Prognosis Committee will attempt to "arrive at a clear consensus with respect to the prognosis of the patient" and shall report its conclusions in writing to the chairman of the hospital's Board of Trustees.

6. The report of the Prognosis Committee shall then be made known to the attending physician and to the family. If the Committee's prognosis concurs with that of the attending physician, the latter, with the agreement of the family, "may then proceed with the appropriate course of action and, if indicated, shall personally withdraw life-support systems."

These guidelines are not flawless, but neither are they engraved in stone. They should be implemented promptly in every New Jersey hospital or institution which treats "patients who are or who may become comatose and non-cognitive." Although the guidelines do not have the power of law, they do provide an approach which will free guardians, physicians, hospitals, and others from the fear of civil or criminal liability for causing the withdrawal of the life-support system from a patient whose prognosis is hopeless.

There should be no delay in the development of a Prognosis Committee by every New Jersey inpatient health care facility, including hospitals, nursing homes, rehabilitation centers, or other institutions as designated in the Health Care Facilities Planning Act (N.J.S.A. 26:24-2a).
A.K.



Cover Photo

The cover photograph is an early morning shot of a surfer off the Jersey shore. It was taken by Richard Musgnug, M.D., a practicing dermatologist in Cherry Hill, who is chairman of MSNJ's Committee on Environmental Health. He has been an ardent conservationist for years and has won awards for nature photography on both a local and national level.

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Corynebacterium
Streptococcus
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211th ANNUAL MEETING

The Medical Society of New Jersey

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John S. Madara, M.D.
President

James E. D. Gardam, M.D.
Chairman, Annual Meeting
Committee and Committee
on Scientific Program

Francis X. Keeley, M.D.
Chairman, Committee on
Scientific Exhibits

Marion R. Walton
Convention Manager

May 14-17, 1977
Chalfonte-Haddon Hall
Atlantic City

1977 Annual Meeting

RESUMÉ OF EVENTS

Registration

Saturday, May 14 from 8:30 a.m. to 4:30 p.m.
 Sunday, May 15 from 8 a.m. to 4:30 p.m.
 Monday, May 16 from 8:30 a.m. to 4:30 p.m.
 Tuesday, May 17 from 9 a.m. to noon

House of Delegates

First Session — Saturday, May 14, 3:30 p.m.
 Second Session — Sunday, May 15, 3 p.m.
 Third Session (part I) — Monday, May 16, 3 p.m.
 Third Session (part II) — Tuesday, May 17, 9 a.m.

Reference Committees

Saturday, May 14, 5 p.m. —
 Reference Committee on Const. and Bylaws
 Reference Committees "A", "B", "D", "G"
 Sunday, May 15, 10 a.m. —
 Reference Committees "C", "E", "F", "H"

Golden Merit Award

Saturday, May 14, 12 noon — Honored will be those members of MSNJ who have held the degree of Doctor of Medicine for fifty years. Reception immediately following ceremony.

Motion Picture Theater

Saturday, May 14, 2 p.m. Sunday and Monday, May 15 and 16, 10 a.m. and 2 p.m. Program arranged and presented through the cooperation of Roche Laboratories, Division of Hoffmann-LaRoche, Inc., Nutley.

General Session

Sunday, May 15, 3:45 p.m. — President's Forewell Address; Presentation of Fellow's Key; Inauguration of Incoming President; Address of Incoming President

Scientific Program: Sections

Sunday, May 15, 9 a.m.
 Allergy
 Cardiovascular Diseases, Family Practice, Medicine
 Dermatology
 Emergency Medicine
 Pediatrics, Psychiatry
 Sunday, May 15, 1 p.m.
 Anesthesiology, Family Practice
 Medicine, Rheumatism
 Ophthalmology
 Otolaryngology

Plastic and Reconstructive Surgery
 Urology

Monday, May 16, 9 a.m.
 Clinical Pathology, Obstetrics and Gynecology, Surgery
 Gastroenterology and Proctology, Radiology
 Neurosurgery and Neurology, Orthopedic Surgery
 Monday, May 16, 9:30 a.m.
 Chest Diseases, Medicine
 Family Practice
 Monday, May 16, 1 p.m.
 Family Practice
 Physical Medicine and Rehabilitation

Social Events

Saturday, May 14, 7:30 p.m.
 Cozy Morley Wing-Ding and Bash
 Cocktails, Dinner, Dancing, Entertainment
 Sunday, May 15, 6:30 p.m.
 Inaugural Reception Honoring President-Elect and Mrs. Begen
 Sunday, May 15, 8 p.m.
 Inaugural Dinner Honoring President-Elect and Mrs. Begen
 Monday, May 16, 8:00 p.m.
 Annual Dinner-Dance Honoring President and Mrs. Madaro
 Dancing — Howard Reynold's Orchestra
 Entertainment — Cozy Marley Show

Miscellaneous

Saturday, May 14, 9:00 a.m. — Governor's Conference on Government and Medicine
 Saturday, May 14, 11:30 a.m. — Meeting, New Jersey Committee on Trauma; 12 noon — Luncheon; 1:30 p.m. — Spencer T. Snedecor Trauma Oration
 Saturday, May 14, 6 p.m. — Jefferson Medical College Alumni Reception
 Sunday, May 15, 7:15 a.m. — Prayer Breakfast
 Sunday, May 15, 8:30 a.m. — AMA Issues Workshop
 Sunday, May 15, 10:00 a.m. — Meeting, New Jersey Academy of Ophthalmology and Otolaryngology
 Sunday, May 15, 12 noon — Luncheon
 New Jersey State Society of Anesthesiologists
 New Jersey Chapter, American College of Emergency Physicians
 New Jersey Academy of Ophthalmology and Otolaryngology
 New Jersey Dermatological Society

Sunday, May 15, 4:30 p.m. — Meeting
 Society for the Relief of Widows and Orphans of
 Medical Men of New Jersey
 Monday, May 16, 7:30 a.m. — JEMPAC Breakfast
 Monday, May 16, 12 noon — Luncheon
 New Jersey Academy of Family Physicians
 New Jersey Orthopaedic Society
 Monday, May 16, 12:30 p.m. — Luncheon
 New Jersey Chapter, American College of Chest
 Physicians

Monday, May 16, 3:00 p.m. — Meeting
 New Jersey Association of Electromyography
 and Electrodiagnosis
 Monday, May 16, 5:30 p.m. — JEMPAC Wine and
 Cheese Reception
 Tuesday, May 17, 7:45 a.m. — Joint Breakfast
 Meeting, Bergen and Passaic County Medical
 Societies
 Tuesday, May 17, 7:45 a.m. — Breakfast
 Essex County Medical Society

AMA Issues Workshop

Sunday, May 15
 8:30 a.m.

1977 Annual Meeting

DAILY SCHEDULE

Saturday through Tuesday
 May 14 to 17

Chalfonte-Haddon Hall
 Atlantic City

Friday, May 13, 1977

3:30 p.m. — Board of Trustees

Saturday, May 14, 1977

8:30 a.m. — Registration Opens
 9:00 a.m. — 3rd Annual Governor's Conference on
 Government and Medicine
 10:45 a.m. — Coffee Break
 11:30 a.m. — Meeting: New Jersey Committee on
 Trauma
 12 noon — Exhibits Open
 12 noon — Golden Merit Award Ceremony and
 Reception for Award Recipients and

their families

12 noon — Luncheon — New Jersey Committee on
 Trauma
 1:30 p.m. — Annual Spencer T. Snedecor Trauma
 Oration, New Jersey Committee on
 Trauma
 2:00 p.m. — Motion Picture Theater
 3:30 p.m. — House of Delegates
 5:00 p.m. — Reference Committees: Constitution
 and Bylaws; "A"; "B"; "D"; "G"
 6:00 p.m. — Jefferson Medical College Alumni
 Reception
 7:30 p.m. — 2nd Annual Cozy Morley Wing-Ding
 and Bash — Cocktails, Dinner, Enter-
 tainment, Dancing (Tickets on sale at
 Registration Desk — \$15 per person)

Sunday, May 15, 1977

- 7:15 a.m. — 1st Annual Prayer Breakfast. All members, official guests, their wives, and Auxiliary members are invited (Tickets on sale at Registration Desk — \$6.50 per person)
- 8:00 a.m. — Registration Opens
- 8:30 a.m. — AMA Issues Workshop
- 9:00 a.m. — Exhibits Open
- 9:00 a.m. — Scientific Sessions:
Allergy, Cardiovascular Diseases, Family Practice, Medicine, Dermatology, Emergency Medicine, Pediatrics, Psychiatry
- 10:00 a.m. — Meeting — New Jersey Academy of Ophthalmology and Otolaryngology
- 10:00 a.m. — Matian Picture Theater
- 10:00 a.m. — Reference Committees:
"C"; "E"; "F"; "H"
- 12 noon — Luncheons:
New Jersey Chapter, American College of Emergency Physicians
New Jersey State Society of Anesthesiologists
New Jersey Dermatological Society
New Jersey Academy of Ophthalmology and Otolaryngology
- 1:00 p.m. — Scientific Sessions:
Anesthesiology
Family Practice
Medicine, Rheumatism
Ophthalmology
Plastic and Reconstructive Surgery
Urology
- 2:00 p.m. — Matian Picture Theater
- 3:00 p.m. — House of Delegates (election)
- 3:45 p.m. — General Session: Addresses by President Madara and President-Elect Begen
- 4:30 p.m. — Meeting: Society for the Relief of Widows and Orphans of Medical Men of New Jersey
- 6:30 p.m. — Inaugural Reception Honoring President-Elect Begen
Host — Bergen County Medical Society. All members, official guests, their wives, and Auxiliary members are invited (Tickets — reception only — on sale at Registration Desk — \$5.00 per person)
- 8:00 p.m. — Inaugural Dinner Honoring President-Elect Begen
Host — Bergen County Medical Society. (Tickets — dinner only — on sale at Registration Desk — \$18.50 per person)

Monday, May 16, 1977

- 7:30 a.m. — JEMPAC Breakfast (Tickets on sale at Registration Desk — \$6.50 per person)
- 8:30 a.m. — Registration Opens
- 9:00 a.m. — Exhibits Open
- 9:00 a.m. — Scientific Sessions:
Clinical Pathology, Obstetrics and Gynecology, Surgery
Gastroenterology and Proctology, Radiology
Neurology and Neurosurgery Orthopedic Surgery
- 9:30 a.m. — Chest Diseases, Medicine
Family Practice
- 10:00 a.m. — Matian Picture Theater
- 12 noon — Luncheon Meetings:
New Jersey Academy of Family Physicians
New Jersey Orthopaedic Society
- 12:30 p.m. — Luncheon
New Jersey Chapter, American College of Chest Physicians
- 1:00 p.m. — Scientific Sessions:
Family Practice
Physical Medicine and Rehabilitation
- 2:00 p.m. — Matian Picture Theater
- 3:00 p.m. — House of Delegates
- 3:00 p.m. — Meeting — New Jersey Association of Electromyography and Electrodagnosis
- 3:00 p.m. — Exhibits Close
- 5:30 p.m. — JEMPAC: Cheese and Wine Reception
All members, official guests, their wives, and auxiliary members are invited
- 8:00 p.m. — Dinner-Dance Honoring President and Mrs. Madara
All members, official guests, their wives, and Auxiliary members are invited (Tickets on sale at Registration Desk — \$15 per person)

Tuesday, June 8, 1976

- 7:45 a.m. — Joint Breakfast Meeting
Bergen and Passaic County Medical Societies
— Essex County Medical Society
Breakfast
- 9:00 a.m. — Registration Opens
- 9:00 a.m. — House of Delegates
- 12 noon — Registration Closes
- 4:00 p.m. — Board of Trustees followed by Annual Meeting of the Board of Governors of the Medical Inter-Insurance Exchange of New Jersey

Governor's Conference

Government and Medicine: Local, State, and National Problems

Saturday, May 14, 1977

9:00 a.m.

Moderator — Francis X. Keeley, M.D., Vice-Chairman, Committee on Annual Meeting

Welcome and Introductions — John S. Modoro, M.D., President, MSNJ

Keynote Address — Honorable Brendan T. Byrne, Governor of New Jersey

Remarks — Richard E. Polmer, M.D., President, AMA

Local Problems

Honorable Poul Jordan, M.D.
Mayor of Jersey City

State Problems

Gerold J. Reilly, Director
Division of Medical Assistance and Health Services
State of New Jersey

National Problems

Charles Edwards, M.D., Vice-President
Becton-Dickinson, Inc.
Rutherford, New Jersey

General Discussion

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1977 Annual Meeting

GOLDEN MERIT AWARDS

Saturday, May 14

12 noon

Presiding

Jahn S. Madaro, M.D., President

Master of Ceremonies

John P. Kengeter, M.D., Chairman, Council on Public Relations

Marshals

Presidents of Component Societies whose members are receiving awards

The Golden Merit Award, established in 1957, is conferred upon every member of The Medical Society of New Jersey who has held the degree of Doctor of Medicine for fifty years.

Recipients For 1977

Atlantic	Joseph Elliott Kaplan, M.D. Marcus Mogill, M.D.		Meyer Henry Friedman, M.D. Jeannette Munra, M.D. Marta Malvina Val-Tretter, M.D. Joshua Norman Zimskind, M.D.
Bergen	Samuel Baswell Reich, M.D. Herbert Edward Reinhold, M.D. Harald Henry Vandersluis, M.D. Joseph Francis Videtti, M.D. David Merrill Weeks, M.D. Grace Blauvelt Welles, M.D.	Middlesex	Isidore Goldberg, M.D. Jahn Dorcus Witmer, M.D.
Burlington	Somuel Thomas Busansky, M.D.	Monmouth	Samuel Sidney Adler, M.D. C. Malcolm B. Gilman, M.D. Louis Kalmen Marganstein, M.D. Martin A. Quirk, M.D. Philip Joseph Santora, M.D. Ernest Stark, M.D.
Camden	Harold Korb Eynan, M.D. Charles Kutner, M.D. Frederick William Straus, M.D.	Morris	Charles Kenneth Carleton, M.D. Charles Archie Crandell, M.D. Margaret H. Gantt, M.D. Jahn Henry Horrington, M.D. Otta Rubens, M.D.
Cumberland	Maurice Berenda Cahen, M.D.	Passaic	James Marshall Allen, M.D. George Lawrence Becker, Sr., M.D. Anthony James Delaria, M.D. Harry Granger Rinzler, M.D. I. Jerome Sobel, M.D. Somuel C. Yochnin, M.D. Jacob Allen Yoger, M.D.
Essex	Henry Briggs, M.D. Ferdinand Charles Dingel, M.D. Sal Morvin Danchi, M.D. Sal J. Fonburg, M.D. Jahn Francis Judge, M.D. Francis W. Pizzi, M.D. Sydney Rasenthal, M.D. Francesca C. N. Sbarra, M.D. Harry Schreck, M.D. Ludwig L. Simon, M.D.	Salem	Ira Lee Cattrell Hummel, M.D.
Hudson	Henry Arthur Christion, M.D. Vincent Justus Felitti, M.D. Marris Flichtenfild, M.D. Moses Mordecai Rothberg, M.D. Fred Sochs, M.D.	Somerset	James Linwood Young, M.D.
Hunterdon	Oscar McClellon Roce, M.D.	Union	Salaman Abramsan, M.D. Arthur Fowler Ackerman, M.D. Alexander Elio Breslow, M.D. Mortan Gittelman, M.D. Herman Harold Goldstein, M.D. George Loda, M.D. Arthur Dentan Seybold, M.D.
Mercer	Charles Wolter Corroll, M.D. Harald L. Davis, M.D.		

Annual Spencer T. Snedecor Trauma Oration

Saturday, May 14, 1977

Haddon Hall, Atlantic City

1:30 p.m.

A Systems Approach to Treating Multiple Body Injuries

R. ADAMS COWLEY, M.D., Professor of Thoracic and Cardiovascular Surgery, University of Maryland School of Medicine; and Director, Maryland Institute of Emergency Medicine and Division of Emergency Medical Services, State of Maryland, Baltimore

The New Jersey Committee on Trauma will present its Annual Spencer T. Snedecor Trauma Oration during the 211th Annual Meeting of The Medical Society of New Jersey. Preceding the lecture, there will be a meeting of the Committee at 11:30 a.m. and a luncheon at 12 noon.

(Members of The Medical Society of New Jersey and other physicians are invited to attend.)

"On Call Services" Emergency Medical Care

The Atlantic County Medical Society will cover emergency situations during the 211th Annual Meeting of MSNJ, May 13-17, 1977

Contact the Registration Desk or the Message Center in the Exhibit Hall

Medical Coordinator: Frank B. Doggett, Jr., M.D.

Officers of the Day:

Medicine and Cardiology	— Robert W. Shovelson, M.D. Maria Kleiber, M.D.
General Surgery	— Morton A. Rosenblott, M.D. Alfred A. Rosenblott, M.D. Samuel S. Stetzer, M.D. W. Aarons, M.D.
Emergency Services	— Morton W. Leach, M.D. and his staff

Specialties will be covered by the Atlantic County Medical Center

Prayer Breakfast

Sunday, May 15, 1977

7:15 a.m.

Opening Remarks

Thomas H. McGlade, M.D.
Chairman, Committee on
Medicine and Religion

Invocation

Watson E. Neiman, M.D.

Comments

John S. Madara, M.D., President,
Medical Society of New Jersey

Blessing of the Food

Breakfast

Scripture

Old Testament

Emanuel M. Satulsky, M.D.,
Fellow, MSNJ

New Testament

Frank J. Hughes, M.D., K.S.G.

Message

C. Everett Koop, M.D.

Benediction

Louis G. McAfoos, M.D.

All members, official guests, their wives and Auxiliary members
are invited — tickets on sale at Registration Desk — \$6.50 per person

Official Delegates and Guests

Sidney L. Cramer, M.D. — Delegate from Connecticut

Richard E. Palmer, M.D., AMA President — Guest

C.E. Graybeal, M.D., President, Medical Society of Delaware — Guest

—1977 Annual Meeting—

CONVENTION REVELRY

Saturday, May 14

Haddon Hall, Atlantic City

Cozy Morley Wing-Ding and Bash — 7:30 p.m.

Cocktails — Dinner

Entertainment — Cozy Morley

Singer/Comedian/Musician

Valley Forge Highland Band and Dancers

Dancing — Howard Reynolds Orchestra

(Tickets on sale at Registration Desk — \$15 per person)

Inaugural Reception — 6:30 p.m.

Inaugural Dinner — 8:00 p.m.

Honoring President-Elect and Mrs. Frank R. Begen

Sunday, May 15

(Tickets on sale at Registration Desk — Reception \$5 — Dinner — \$18.50 per person)

—1977 Annual Meeting—

DINNER-DANCE

Monday, May 16

8:00 p.m.

Honoring

President and Mrs. John S. Modoro

Welcome

James E. D. Gordon, M.D., Chairman
Committee on Annual Meeting

Introductions

John S. Modoro, M.D., President
The Medical Society of New Jersey

Entertainment and Dancing

Cozy Morley Show — Singer/Comedian
Howard Reynolds Orchestra

REFERENCE COMMITTEES

Saturday, 5:00 p.m.

Sunday, 10:00 a.m.

May 14, 1977

May 15, 1977

Reference Committee on Constitution and Bylaws

Reports of the:

Committee on Revision of Constitution and Bylaws

Amendments to Constitution

Amendments to Bylaws

Reference Committee "A"

Reports of the:

President

Board of Trustees

Secretary

Judicial Council

Executive Director

Committee on Credentials

Committee on Long Range Planning and Development

Reference Committee "B"

Reports of the:

Treasurer

Committee on Finance and Budget

Committee on Medical Student Loan Fund

Committee on Physician's Relief Fund

Committee on Publication

Widows and Orphans Society

Reference Committee "C"

Reports of the:

Medical-Surgical Plan of New Jersey

Committee on Medical Defense and Insurance

Committee on Retirement Plan for Physicians

Medical Inter-Insurance Exchange of New Jersey

Reference Committee "D"

Reports of the:

Committee on Medical Education

Committee on Medicine and Religion

Committee on Emergency Medical Care

Reference Committee "E"

Reports of the:

Council on Legislation

Council on Public Relations

Reference Committee "F"

Reports of the:

Council on Medical Services, and its Special

Committee on Occupational Health, Work-

men's Compensation and Rehabilitation

Council on Mental Health

Committee on Medicaid

Membership Inquiries and Complaint Com.

Reference Committee "G"

Reports of the:

Committee on Chronically Ill and Aging

Council on Public Health, and its Special Committees on:

Cancer Control

Child Health

Conservation of Hearing and Speech

Conservation of Vision

Environmental Health

Maternal and Infant Welfare

Reference Committee "H"

Reports of the:

Committee on Annual Meeting, and its Special

Committee on Scientific Program

Committee on Honorary Membership

MSNJ Auxiliary Committee

Nominations for Emeritus Membership

The Committee on Credentials will meet at the Registration Desk each morning.

VISIT THE EXHIBITS

1977 Annual Meeting

HOUSE OF DELEGATES

Saturday, 4:00 p.m.
 Sunday, 3:00 p.m.
 Monday, 3:00 p.m.
 Tuesday, 9:00 a.m.

May 14, 1977
 May 15, 1977
 May 16, 1977
 May 17, 1977

President — John S. Modaro, M.D., Solem

Secretary — Arthur Bernstein, M.D., Moplewood

Speaker — Henry J. Mineur, M.D., Cronford

Vice Speaker — James E. George, M.D., J.D., Waadbury

Sergeants-at-Arms — Harry M. Cornes, M.D., Comden County

James E. D. Gardom, M.D., Essex County

Frederick W. Durham, M.D., Comden County

Sessions

Saturday, May 14, 1977 — 3:30 p.m.

First Session

Invocation

Reverend John J. Schilthuis, Pastor

First Presbyterian Church of Salem

Call to Order by the Speaker

Henry J. Mineur, M.D.

Organization of the House

Transactions of 1976 House of Delegates

Transactions of 1976 Special Session

Introduction of Guests and Delegates

from Other States

Annual and Supplemental Reports

Proposed Amendments to the Constitution

and Bylaws

Resolutions

New Business

Announcements

Sunday, May 15, 1977 — 3:00 p.m.

Second Session

Report of Nominating Committee

Election

General Session

President's Farewell Address and Presentation

of Fellow's Key

Inauguration of Incoming President

Monday, May 16, 1977 — 3:00 p.m.

Third Session (Part I)

Reports of Reference Committees: "A", "B", "D",

"G", Const. and Bylaws

Tuesday, May 17, 1977 — 9 a.m.

Third Session (Part II)

Reports of Reference Committees: "C", "E", "F", "H"

Unfinished Business

Adjournment

OFFICES TO BE FILLED BY ELECTION — 1977 Annual Meeting

OFFICE	TERM	FROM	TO	INCUMBENT AND COUNTY
President-Elect	1 year	May 1977-May 1978		Frank R. Begen, M.D. Bergen
1st Vice-President	1 year	May 1977-May 1978		Charles S. Krueger, M.D. Burlington
2nd Vice-President	1 year	May 1977-May 1978		Alfred A. Alessi, M.D. Bergen
Secretary	3 years	May 1977-May 1980		Arthur Bernstein, M.D. Essex
Treasurer	3 years	May 1977-May 1980		Rudolph C. Gering, M.D. Mercer
Trustees				
1st District	3 years	May 1977-May 1980		George L. Benz, M.D. Essex
2nd District	3 years	May 1977-May 1980		James S. Todd, M.D. Bergen

4th District	1 year	May 1977-May 1978	^d S. Thomas Carter, Jr., M.D. Camden
5th District	3 years	May 1977-May 1980	Sherman Garrison, M.D. Cumberland
Judicial Councilors			
2nd District	3 years	May 1977-May 1980	Jahn L. Olpp, M.D. Bergen
5th District	3 years	May 1977-May 1980	Jahn A. Surmante, M.D. Salem
AMA Delegates	2 years	Jan. 1978-Dec. 1979	Louis F. Albright, M.D. Manmouth
	2 years	Jan. 1978-Dec. 1979	James S. Tadd, M.D. Bergen
AMA Alternate Delegates	2 years	Jan. 1978-Dec. 1979	Alfred A. Alessi, M.D. Bergen
	2 years	Jan. 1978-Dec. 1979	William J. D'Elia, M.D. Manmouth
	2 years	Jan. 1978-Dec. 1979	Frederick W. Durham, M.D. Camden
	2 years	Jan. 1978-Dec. 1979	Howard D. Slabadien, M.D. Middlesex
Delegates and Alternate Delegates to Other States			
New York:			
Delegate	1 year	1978 Annual Meeting	Albert F. Maricani, M.D. Mercer
Alternate	1 year	1978 Annual Meeting	F. Sterling Brawn, M.D. Atlantic
Connecticut:			
Delegate	1 year	1978 Annual Meeting	Edward G. Bourns, M.D. Union
Alternate	1 year	1978 Annual Meeting	Gastane A. Milana, M.D. Atlantic
Administrative Councils			
Legislation			
1st District	3 years	May 1977-May 1980	Jahn R. Tabey, M.D. Essex
4th District	3 years	May 1977-May 1980	Meyer L. Abrams, M.D. Burlington
Medical Services			
1st District	3 years	May 1977-May 1980	^b Joseph A. Lepree, M.D. Union
4th District	3 years	May 1977-May 1980	Charles O. Tyler, M.D. Camden
Mental Health			
1st District	3 years	May 1977-May 1980	^c Arnald Kallen, M.D. Essex
4th District	3 years	May 1977-May 1980	^c Eugene V. Resnick, M.D. Bergen

^a Resulting from resignation of I. Edward Ornaf, M.D.

^b Emeritus Member, Ineligible

^c Ineligible, having served three consecutive terms

^d Board-appointed to serve until 1977 House election

Public Health 1st District	3 years	May 1977-May 1980	Edward M. Cae, M.D. Unian
4th District	3 years	May 1977-May 1980	^c Frederick C. Steller, M.D. Manmouth
Public Relations 1st District	3 years	May 1977-May 1980	Frank Y. Watson, M.D. Essex
4th District	3 years	May 1977-May 1980	^c Jahn P. Kengeter, M.D. Ocean
Standing Committees Annual Meeting	3 years	May 1977-May 1980	James H. Spillane, M.D. Warren
Finance and Budget	3 years	May 1977-May 1980	^a Charles S. Krueger, M.D. Burlington
Medical Defense and Insurance	3 years	May 1977-June 1980	Frank J. Malta, M.D. Ocean
Medical Education	3 years	May 1977-May 1980	Arthur Bernstein, M.D. Essex
Publication	3 years	May 1977-May 1980	Julia del Castilla, M.D. Mercer
Auxiliary Advisory	3 years	May 1977-May 1980	Frederick W. Durham, M.D. Camden

^bEmeritus Member, Ineligible

^cIneligible, having served three consecutive terms

^aMust be member of 1977 House of Delegates

Governor's Conference

Saturday, May 14

9:00 a.m.

**Government and Medicine
Local — State — National**

Governor Byrne
MSNJ President Madara
AMA President Palmer
Paul Jordan, M.D.
Gerald J. Reilly
Charles Edwards, M.D.

Reference Committee "H" Special Meeting Tuesday, May 17 — 8 a.m.

(Coffee and Danish Pastry Served)

Annual Selman Waksman Lecture

New Jersey Chapter
American College of Chest Physicians

Monday, May 16, 12:30 p.m.

DINNER-DANCE

Manday, May 16, 1977

Entertainment

Cozy Morley Show

Dancing

Howard Reynolds Orchestra

(Tickets at Registration Desk)

MOTION PICTURE THEATER

Saturday, May 14, 2 p.m. — Sunday and Monday, May 15 and 16, 10 a.m. and 2 p.m.

Film program presented through the courtesy and cooperation of Roche Laboratories,
Division of Hoffmann-LoRoche, Inc., Nutley

Saturday, May 14

2:00 p.m. — Death of a Cell

Presented through the courtesy of E.R. Squibb & Sons, Inc.

2:20 p.m. — Micropuncture of Cells

Presented through the courtesy of E.R. Squibb & Sons, Inc.

2:45 p.m. — Techniques of Cell Assembly

Presented through the courtesy of E.R. Squibb & Sons, Inc.

2:55 p.m. — Development of the Heart

Presented through the courtesy of E.R. Squibb & Sons, Inc.

3:30 p.m. — William Harvey and the Circulation of the Blood

Presented through the courtesy of Burroughs Wellcome Co.

Sunday — May 15

10:00 a.m. — Community Treatment of the Psychotic Patient

Presented through the courtesy of E.R. Squibb & Sons, Inc.

10:40 a.m. Psychiatric Services in General Hospital

Presented through the courtesy of E.R. Squibb & Sons, Inc.

11:15 a.m. — A Chance for Change

Presented through the courtesy of E.R. Squibb & Sons, Inc.

2:00 p.m. — Respiratory Distress

Presented through the courtesy of E.R. Squibb & Sons, Inc.

2:20 p.m. — Mediastinoscopy

Presented through the courtesy of E.R. Squibb & Sons, Inc.

2:45 p.m. — Hypertension-The Challenge of Diagnosis

Presented through the courtesy of E.R. Squibb & Sons, Inc.

3:10 p.m. — Congenital Anomalies of the Heart

Presented through the courtesy of E.R. Squibb & Sons, Inc.

Monday, May 16

10:00 a.m. — GI-Surgery — Cinefluorography of Upper Gastrointestinal Tract Lesions

Presented through the courtesy of E.R. Squibb & Sons, Inc.

10:45 a.m. — Portal Decompression

Presented through the courtesy of E.R. Squibb & Sons, Inc.

11:20 a.m. — Nutritional Therapy

Presented through the courtesy of E.R. Squibb & Sons, Inc.

2:00 p.m. — Attorney/Physician — Cooperation in the Defense of Medical Malpractice Cases

Presented through the courtesy of Roche Laboratories

2:45 p.m. — Gout Learning System

Presented through the courtesy of Burroughs Wellcome Co.

3:20 p.m. — Biopharmaceutics

Presented through the courtesy of Burroughs Wellcome Co.

SPEAKERS

Abel, Ronold, M.D., New York

Boer, Rudolph, M.D., New York
Becker, George L., Jr., M.D., Fair Lawn
Begen, Frank R., M.D., Teoneck
Berg, Roger A., M.D., Morristown
Betts, R. Winfield, M.D., Mount Holly
Byrne, Brendon T., The Honorable
Governor of New Jersey, Trenton

Cowley, R. Adams, M.D., Baltimore

Duff, Roymond S., M.D., New Haven
Durham, Frederick W., M.D., Haddonfield

Edwards, Charles, M.D., Rutherford
Einhorn, Theodore, L.L.B., Denville

Fischbein, Robert M., M.D., Livingston
Fondo, Gerold, M.D., Short Hills
Friedman, Michael P., M.D., Trenton

Goldwyn, Robert M., M.D., Boston
Goodman, Harry P., M.D., Atlantic City
Goodstein, Charles, M.D., Englewood
Greene, Robert C., M.D., Montclair
Griswold, Merton L., Jr., M.D., Plainfield
Guthrie, Randolph H., Jr., M.D., New York

Horber, Leonard C., M.D., New York
Horris, William, M.P.H., Trenton
Hughes, Frank J., M.D., Gloucester
Hupert, Cesio, M.D., Poterson
Hutter, Robert V. P., M.D., Livingston

Jordon, Poul, M.D., The Honorable
Mayor of Jersey City

Kollman, Harold, M.D., Edison
Kostor, John, M.D., Philadelphia
Koufman, Richard J., M.D., New York
Keeley, Francis X., M.D., Haddonfield
Kloiner, Albert S., M.D., Morristown
Klein, Edmund, M.D., Buffalo
Koop, C. Everett, M.D., Philadelphia
Koven, Bernard J., M.D., Englewood
Krieger, Abbott J., M.D., New York

Lindman, Louis, M.D., Englewood
Lozoro, Eric J., M.D., Newark
Liss, Henry R., M.D., Chatham
Luskin, Ralph, M.D., New York

McKenzie, James W., M.D., Piscataway
Modoro, John S., M.D., Salem
Mohammed, Porvez, M.D., Lakewood
Mortin, Leonard, M.D., Newark
McAfoos, Louis G., M.D., Cherry Hill
McGlade, Thomas H., M.D., Camden
Middleton, Elliott, Jr., M.D., Buffalo
Minogue, William F., M.D., Summit
Morrone, Louis, M.D., Newark
Murphy, John J., M.D., Philadelphia

Neiman, Watson E., M.D., Cherry Hill

Palmer, Richard E., M.D., Chicago
Pearlman, Theodore F., M.D., Newark
Phillips, A., Jr., M.D., Newark
Press, Lorin, M.D., Newark

Reilly, Gerold J., Trenton
Rivo, Humbert L., M.D., Short Hills
Robins, Perry, M.D., New York
Rothman, Richard H., M.D., Philadelphia
Rush, Benjamin F., Jr., M.D., Newark

Sonfilippo, Louis J., M.D., Livingston
Sotulsky, Emanuel M., M.D., Elizabeth
Scheer, Alon Austin, M.D., New York
Schor, Martin J., M.D., Lakewood
Sholito, Alon, M.D., Brooklyn
Silverstein, Ellen, M.D., Morristown
Som, M., M.D., New York
Stein, Lawrence, M.D., Livingston
Stump, Jacob E., Jr., M.D., Englewood

Ulton, Leslie B., M.D., Trenton
Urban, Jerome A., M.D., New York

Wolles, Peter P., M.D., Westville
Wong, Stephen F., M.D., Morristown
Wood-Smith, Donald, M.D., New York

Yablonski, Michael, M.D., Hockensock

SCIENTIFIC SECTION OFFICERS

Saturday through Tuesday
May 14-17

Chalfonte-Haddon Hall
Atlantic City

Allergy

Chairman — Michael A. Diamand, M.D., Livingston
Secretary — Carolyn E. Gaadstein, M.D., Englewood

Anesthesiology

Chairman — W. Alan Wright, M.D., Mantclair
Secretary — Victor Garber, M.D., Mantvale

Cardiovascular Diseases

Chairman — Harry A. Raselle, M.D., Englewood
Secretary — Ernest Landy, M.D., Hasbrauck Heights

Chest Diseases

Chairman — Jack H. Dadaian, M.D., Glen Ridge
Secretary — Norman Edelman, M.D., Princeton

Clinical Pathology

Chairman — Lester Kiefer, M.D., Perth Ambay
Secretary — Walter Uhlman, M.D., Flemington

Dermatology

Chairman — Robert M. Fischbein, M.D., Livingston
Secretary — Jerrald Graff, M.D., Westfield

Emergency Medicine

Chairman — R. Winfield Betts, M.D., Mt. Holly
Secretary — Michael Sarik, M.D., Cinnaminson

Family Practice

Chairman — Daniel C. Keesee, M.D., Flarham Park
Secretary — George L. Triebenbacher, M.D., Beach Haven

Gastroenterology and Proctology

Chairman — Raymond F. Crystal, M.D., Murrstawn
Secretary — Stephen Wang, M.D., Murrstawn

Medicine

Chairman — Leonard S. Danzig, M.D., Red Bank
Secretary — Barry R. Zitamer, M.D., Murrstawn

Neurosurgery and Neurology

Chairman — Eugene W. Laeser, M.D., Chatham
Secretary — Lawrence Strenger, M.D., Atlantic City

Urology

Chairman — Truman D. Bayes, M.D., Plainfield
Secretary — Robert H. Stackpole, M.D., Roselle

Obstetrics and Gynecology

Chairman — Jerame A. Dalan, M.D., Jersey City
Secretary — Pascal L. Federici, M.D., Lang Branch

Ophthalmology

Chairman — Malcolm H. Blach, M.D., Murrstawn
Secretary — Ralph A. Skawran, M.D., Cherry Hill

Orthopaedic Surgery

Chairman — Rudolph C. Dangelmajer, M.D., Summit
Secretary — Paul J. Hirsch, M.D., Bridgewater

Otolaryngology

Chairman — Frank L. Kardas, M.D., Paterson
Secretary — David B. Garmise, M.D., Clark

Pediatrics

Chairman — Rager B. Kane, M.D., Dover
Secretary — Miles E. Drake, M.D., Vineland

Physical Medicine and Rehabilitation

Chairman — Richard A. Chidsey, M.D., Cherry Hill
Secretary — Seymour Pedinoff, M.D., Mantclair

Plastic and Reconstructive Surgery

Chairman — Jerame Spivack, M.D., Mountainside
Secretary — Arthur B. David, M.D., Murrstawn

Psychiatry

Chairman — Martin Friedman, M.D., Millburn
Secretary — Henry Kaminer, M.D., Tenafly

Radiology

Chairman — Rager A. Berg, M.D., Murrstawn
Secretary — Michael M. Lazarek, M.D., Plainfield

Rheumatism

Chairman — Louis G. Bosca, M.D., Passaic
Secretary — William E. Ryan, M.D., Trenton

Surgery

Chairman — John H. Landar, M.D., Green Brook Twp.
Secretary — Elmer L. Grimes, M.D., Haddonfield

SCIENTIFIC PROGRAM

Sunday, May 15
Monday, May 16

AMA Category I and
MSNJ-CME Accredited

Scientific Sections Sessions

Authorized to accredit for Continuing Medical Education, The Academy of Medicine of New Jersey certifies that the scientific sessions, provided they are presented as designed, meet the criteria for the listed number of credit hours in Category I of the Physician's Recognition Award of the American Medical Association.

Sunday Morning, May 15

Allergy

(Cosponsored by New Jersey Allergy Society)

9:00 a.m. **Corticosteroids—How They Work**
ELLIOT MIDDLETON, JR., M.D., Professor of Medicine and Pediatrics, Director, Allergy Division, SUNY, Buffalo

Corticosteroids affect the function of many cell types, but exactly which cells in the lung are affected to restore normal lung function in asthma is unknown. Steroids enter cells and combine with a cytoplasmic receptor which is then bound to a nuclear acceptor. The "activated" nuclear complex turns on the transcriptional machinery to produce specific messenger RNA which instructs cytoplasmic ribosomal RNA to synthesize a specific type of protein. It is the new protein presumably different for each cell type, which is responsible for altering cell function in a manner characteristic for the cell.

10:00 a.m. **Coffee Break—Bagels, Lox**

10:15 a.m. **Psychiatry and Allergy: War and Peace**
CHARLES GOODSTEIN, M.D., Clinical Assistant Professor of Psychiatry, Columbia University, New York; and Assistant Attending Psychiatrist, Englewood Hospital, Englewood

Recent advances have given clinical immunology, heretofore an essentially empirical field, a new well-deserved scientific respectability. An unexpected side effect appears to be a growing apathy or even antipathy on the part of allergists to psy-

chiatry, long suspect, though a natural ally. A historical review, an assessment of current thinking, and examples from the author's practice are offered to show the allergist as well as the psychiatrist the contributions of psychiatry to a fuller understanding of etiology and treatment.

11:15 a.m. **Question and Answer Period**

11:30 a.m. **Business Meeting**

11:45 a.m. **Visit to Exhibits**

Two and a Half Credit Hours
AMA Category I and MSNJ-CME

JEMPAC—AMPAC

Breakfast Meeting

Monday, May 16, 7:30 a.m.

(Tickets at Registration Desk—\$6.50)

JEMPAC

Wine and Cheese Reception

Monday, May 16, 5:30 p.m.

(Admission by Badge)

Sunday Morning, May 15

Cardiovascular Diseases Family Practice Medicine

(Cosponsored by New Jersey Academy of Family Physicians and New Jersey Society of Internal Medicine)

9:00 a.m. Symposium: Newer Concepts in Management of Ischemic Heart Disease

JOHN KASTOR, M.D., Associate Professor of Medicine, University of Pennsylvania School of Medicine; and Chief, Cardiovascular Section, Hospital of the University of Pennsylvania, Philadelphia

Summary not received

10:00 a.m. Mechanical Circulatory Assist

RONALD M. ABEL, M.D., Department of Cardiovascular Surgery, New York Hospital—Cornell Medical Center, New York

Over the preceding two decades, many unsuccessful attempts at providing temporary mechanical support to a failing circulation have given way to a clinically expedient, safe, and efficacious method currently employed throughout the country—intra-aortic balloon counterpulsation. The physiological effects of intra-aortic counterpulsation consist primarily of decreasing left ventricular work and augmenting coronary collateral blood flow. The salutary results of these interactions will be discussed fully. The clinical application of such support systems is primarily in patients with severe artery disease. Although patients in profound cardiogenic shock are the most dramatic in their response to temporary intra-aortic balloon counterpulsation followed by emergency coronary arteriography and open-heart surgery, the extreme usefulness of this form of temporary support of patients with refractory myocardial ischemia has been demonstrated increasingly. The feasibility of application of this form of circulatory support at the community hospital level also is discussed.

11:00 a.m. Discussion

11:30 a.m. Business Meeting

11:45 a.m. Visit to Exhibits

**Two and a Half Credit Hours
AMA Category I, MSNJ-CME, and AAFP**

Sunday Morning, May 15

Dermatology

(Cosponsored by New Jersey Dermatologic Society)

MSNJ acknowledges the support of Schering Corporation, Westwood Pharmaceuticals, Owen Laboratories, Neutrogena Corporation, and Lederle Laboratories.

9:00 a.m. Introduction

ROBERT M. FISCHBEIN, M.D., Chairman, Section on Dermatology, Livingston

9:10 a.m. Current Concepts of the Pathogenesis and Treatment of Acne

ALAN SHALITA, M.D., Associate Professor and Head, Division of Dermatology, SUNY Downstate Medical Center; and Director of Dermatology, Kings County Hospital, Brooklyn

Acne Vulgaris is the most common skin disease affecting more than 75 percent of the teen-age and young adult population. It is a disease of sebaceous follicles in which a multifactorial etiology is suggested. At puberty, sebaceous glands enlarge under the influence of androgen in both males and females. Sebum, the sebaceous gland product, appears to be comedogenic in its own right, but also provides a substrate for the growth of *Propionibacterium acnes*, an organism thought to be central in the pathogenesis of acne. Current acne therapy is designed to reduce sebum production, decrease the follicular microbial population and to alter follicular keratinization.

9:45 a.m. Discussion

9:55 a.m. Diagnosis and Management of Photosensitivity Diseases

LEONARD C. HARBER, M.D., Professor and Chairman, Department of Dermatology, Columbia Presbyterian Medical Center, New York

The diagnosis and management of photosensitivity diseases is presented in terms of a working classification and appropriate diagnostic procedures applicable to either office, hospital, or research institute. The etiologic bases of the photosensitivity diseases are considered under the following headings: genetic, metabolic, immunologic, phototoxic, degenerative, neoplastic, idiopathic, and photo-aggravated. Selected examples of the twenty-six diseases included in this classification will be presented. Appropriate therapy of both a topical and systemic nature will be discussed.

10:30 a.m. Discussion

10:45 a.m. Coffee Break

11:00 a.m. MOHS Surgery for Treatment of Skin Cancer

PERRY ROBINS, M.D., Associate Professor of Clinical Dermatology, NYU Medical Center, New York

Summary not received

11:30 a.m. Discussion

11:45 a.m. Immunotherapeutic Approaches for Tumors of and in the Skin

EDMUND KLEIN, M.D., Associate Chief, Department of Dermatology, Roswell Park Memorial Institute, Buffalo

Summary not received

12:20 p.m. Discussion

12:30 p.m. Luncheon Meeting—New Jersey Dermatologic Society

Reservations:

R. M. Fischbein, M.D.
201 S. Livingston Ave.
Livingston 07039

Contact Allergy: Recent Advances

RUDOLPH L. BAER, M.D., Professor and Chairman, Department of Dermatology, NYU School of Medicine, New York

Allergic eczematous contact dermatitis can be considered a disease in which, in addition to cell-mediated hypersensitivity, antibody-mediated reactions and cutaneous basophile hypersensitivity may be involved to varying degrees. This concept has noteworthy clinical implications with respect to causal factors, diagnosis, and treatment. Factors influencing the competition, upon first exposure to a contact allergen, between the development of hypersensitivity and tolerance will be presented. The varied possible clinical effects of systemic exposure to contact allergens will be discussed.

2:30 p.m. Business Meeting

2:45 p.m. Visits to Exhibits

**Four Credit Hours
AMA Category I and MSNJ-CME**

VISIT THE EXHIBITS

Sunday Morning, May 15

Emergency Medicine

(Cosponsored by the New Jersey Chapter, American College of Emergency Physicians)

9:00 a.m. Training and Utilization of Paramedic Personnel

Moderator:

R. WINFIELD BETTS, M.D., Clinical Director, MICU, Burlington County Memorial Hospital, Mount Holly

Panelists:

LESLIE B. ULTAN, M.D., Chief of Cardiology, Helene Fuld Hospital, Trenton; and Assistant Professor of Medicine in Cardiology, Hahnemann Medical College, Philadelphia

Summary not received

MICHAEL D. YABLONSKI, M.D., Director of Medicine, Hackensack Hospital, Hackensack; and Clinical Associate Professor of Medicine, CMDNJ, New Jersey Medical School, Newark

Results of a three-year experience with pre-hospital coronary care in a community hospital indicate that the majority of ambulance calls (approximately 82 percent) can be handled by ambulance personnel (paid or volunteer) trained at the EMT I level. A simultaneous dispatch system designed to identify the majority of cardiac patients resulted in utilization of a Heart Rescue Team in 18 percent of all calls for medical assistance with a response time of four minutes or less. Over half the patients required hospitalization, including a significant number admitted to special care areas. Although the system was designed primarily to bypass the delays in getting patients in a coronary care system, and not to treat sudden death, a significant number of patients were successfully resuscitated.

WILLIAM F. MINOGUE, M.D., Cardiologist, Overlook Hospital, Summit; and Clinical Professor of Medicine, Columbia University College of Physicians and Surgeons, New York

Summary not received

WILLIAM J. HARRIS, M.P.H., Director Emergency Medical Services, NJ State Department of Health, Trenton

The development of the mobile intensive care paramedic program in New Jersey will be presented, including a brief discussion of the legislation, the training requirements as developed by the State

Health Department and its technical advisory committee, and the participating projects in the pilot programs. Also delineated will be the "peromedic" certifying procedure and the current status of the program.

10:30 a.m. Business Meeting

10:45 a.m. New Concept in Trauma Centers
R. ADAMS COWLEY, M.D., Professor of Thoracic and Cardiovascular Surgery, University of Maryland; and Director, Maryland Institute for Emergency Medicine and Division of Emergency Medical Services, State of Maryland, Baltimore

The goals of a trauma center should include provision of excellent care at all levels, development of standards of therapy for teaching and research, dissemination of knowledge in trauma care, and provision of core systems for the community.

Drawing upon the experience of the development of the Maryland Institute for Emergency Medicine in Baltimore, the presentation describes the types of patients appropriate for a trauma center, the necessary facilities, the center's operation, and the assignment of responsibilities necessary for excellent trauma care, including staffing needs and patterns. The design and location of a trauma center and difficulties in its establishment are discussed.

12:30 p.m. Luncheon—New Jersey Chapter, American College of Emergency Physicians

Reservations:

R. Winfield Betts, M.D.
Burlington County Memorial Hospital, Mount Holly 08060

**Three Credit Hours
AMA Category I and MSNJ-CME**

**Message Center
Exhibit Hall**

Sponsored by

**American Association of Medical Assistants
State of New Jersey**

Telephone messages, information, and assistance
will be available through the courtesy of the
Medical Assistants

Sunday Morning, May 15

**Pediatrics
Psychiatry**

(Cosponsored by American Academy of Pediatrics, New Jersey Chapter, New Jersey Psychiatric Association, New Jersey Psychoanalytic Society, and Academy of Psychoanalysis)

9:00 a.m. Some Psychophilosophical Considerations in the Decision of Living or Dying

LOUIS LANDMAN, M.D., Attending Psychiatrist, Englewood Hospital, Englewood; and Faculty Member and Training Analyst, American Institute for Psychoanalysis

Moral, ethical, and humanitarian considerations relevant to dying when living is threatened by an incurable, painful, hopeless condition is the subject of this paper. Historically, medicine has been dedicated to preserving and prolonging human life. At what point is prolonging life not merciful but inhumane. Do physicians in their extraordinary efforts prolong not life, but the act of dying? Have these extraordinary measures denied man his right to die in peace and with dignity. It may be that our culture resents the imposition of limits and cannot accept death as an ending to a life that has run its course!

9:30 a.m. Primacy of Patients and Families To Live or To Die

RAYMOND S. DUFF, M.D., Assistant Professor of Clinical Pediatrics, Yale University School of Medicine; and Attending Pediatrician, Yale-New Haven Hospital, New Haven

The interests of physicians in the defeat of disease and the concerns of health institutions and health professionals in maintaining a favorable public image have changed the way decisions for care at the end of life are made. Patient, family, and personal physician autonomy have been eroded as health professionals, health institutions, and the legal profession have attempted to deal with problems of care and at the same time to serve themselves. Such erosion should be reversed. Patients and families assisted by health professionals should decide all care, and a choice of death should be available when they find no reasonable alternative to deal with this aspect of human tragedy.

10:00 a.m. Deciding: The Problems It Brings and the Problems Brought to It

JACOB E. STUMP, JR., M.D., Attending Clinical Psychiatrist, Hockensack Hospital, Hockensack; and Assistant

Clinical Professor of Psychiatry,
CMDNJ—New Jersey Medical
School, Newark

The decision to terminate life is aggressive regardless of the variety of good reasons leading to the decision. The effect of the aggression on the observing community is discussed with special reference to aggressivization as the main problem created by the decisions. Special emphasis is placed on the need for tolerance of responses by individuals and groups. The problems of the people involved in the decision-making process are elucidated. The effect of unconscious conflicts of the deciders on their ability to decide and to decide correctly is considered. The need for group decision to prevent either inaction or incorrect action is stressed.

10:30 a.m. The Quinlan Decision—Its Effect on Hospitals and Physicians
THEODORE E. B. EINHORN, L.L.B.,
Counsel for St. Clare's Hospital, Den-
ville

Summary not received

11:00 a.m. Questions and Answers

12 noon Visit to Exhibits

Three Credit Hours
AMA Category I and MSNJ-CME

Sunday Afternoon, May 15

Anesthesiology **Family Practice**

(Cosponsored by New Jersey State Society of Anesthesiologists and New Jersey Chapter, American Academy of Family Physicians)

12 noon Luncheon—New Jersey State Society of Anesthesiologists
Reservations:
A. L. Lucas, M.D.
8 Ames Place
Morristown, 07960

1:00 p.m. Pain and Its Mechanisms
ABBOTT J. KRIEGER, M.D., Professor
and Chief, Neurological Surgery,
CMDNJ—New Jersey Medical
School, Newark; and Chief, Neuro-
surgery Section, Veterans Adminis-
tration Hospital, East Orange

Several mechanisms appear to operate at the level of the first synapse of their connections of the somatic sensory pathway, the function of which seems to be modulation of the transfer of information at the level of the communication chain between the environment and the central nervous system. An attempt to integrate all of these mechanisms into a theory to explain pain perception has been made by Melzack and Wall. The "gate control theory" represents a hypothesis to explain pain. It takes into account the fact that there are no anatomical structures specific for pain and thus pain must be thought of as the result of a particular combination or code of bits of information of varied origin. The gate control theory has given new impetus to pain research and has provided some foundation for the evolution of new approaches to the treatment of pain. On the other hand, the theory has been challenged by several investigators who believe that some of the basic experiments upon which the theory is based may be questionable.

1:30 p.m. Relief of Pain

CESIA HUPERT, M.D., Chairman, De-
partment of Anesthesiology, St.
Joseph's Hospital and Medical Center,
Paterson; and Assistant Professor of
Anesthesiology, NYU Downstate
Medical Center, Brooklyn

The management of patients who are referred to the pain clinic with persistent chronic pain syndromes will be discussed. Most of these patients have been resistant to previous therapeutic trials. Their condition is complicated by hosts of physiological, emotional, and environmental factors. Among these, depression and drug toxicity are most prominent. Every therapeutic regimen must take into consideration all these factors if it is to be successful.

Multimodal management of the more frequent chronic pain syndromes will be presented. Application and limitations of the usual therapeutic modalities (central and peripheral anesthetic and neurolytic nerve blocks, transcutaneous nerve stimulators, drug management, psychological and neurosurgical procedures) used in the treatment of chronic pain will be discussed.

2:00 p.m. Control of Pain by Hypnosis

HARRY P. GOODMAN, M.D., At-
lantic City. Instructor in Hypnosis,
Pennsylvania Institute, University of
Pennsylvania School of Medicine,
Philadelphia

Because of the unreliability of hypnosis as an analgesic-anesthetic, the increased time needed, and the special educational requirements, hypnosis never will challenge present-day anesthesia. Haw-

ever, as a modality in special instances, and in dental and obstetrical procedures, hypnosis should and will have a place.

2:30 p.m. Discussion

3:00 p.m. Business Meeting

3:15 p.m. Visit to Exhibits

**Two Credit Hours
AMA Category I— MSNJ-CME, and AAFP**

Sunday Afternoon, May 15

Medicine Rheumatism

1:00 p.m. Infectious Joint Disease
ALBERT S. KLAINER, M.D., Chairman,
Department of Internal Medicine,
Morristown Memorial Hospital, Mor-
ristown; and Professor of Medicine,
CMDNJ—Rutgers Medical School,
Piscataway

Summary not received

**2:00 p.m. The Interface of Infection and Col-
lagen Disease—Are the Collagen
Diseases Really Infections After
All?**
MICHAEL P. FRIEDMAN, M.D., Direc-
tor, Department of Medicine and
Infectious Diseases, St. Francis Medi-
cal Center, Trenton; and Professor of
Medicine, Hahnemann Medical Col-
lege, Philadelphia

Summary not received

3:00 p.m. Business Meeting

3:15 p.m. Visit to Exhibits

**Two Credit Hours
AMA Category I and MSNJ-CME**

**Jefferson Medical College
Alumni Reception
Honoring
President John S. Madara, M.D.
Saturday, May 14, 6 p.m.**

Sunday Afternoon, May 15

Ophthalmology

(Cosponsored by New Jersey Academy of Ophthal-
mology and Otolaryngology)

**12 noon Luncheon—New Jersey Academy
of Ophthalmology and Otolaryn-
gology**
Reservations:
M. S. Klein
c/o Eye Institute
15 South 9th Street
Newark 07107

**1:00 p.m. Continuous Wear of Silicon Con-
tact Lenses**
LOUIS MORRONE, M.D., Chief Resi-
dent, Associated Eye Residencies of
New Jersey, Eye Institute of New
Jersey, Newark

Summary not received

**1:15 p.m. Review of Blood Flow to Optic
Nervehead**
LEONARD MARTIN, M.D., Resident,
Associated Eye Residencies of New
Jersey, Eye Institute of New Jersey,
Newark

Summary not received

1:30 p.m. Aminoacetophenone in Hyphema
LORIS PRESS, M.D., Resident, Associ-
ated Eye Residencies of New Jersey,
Eye Institute of New Jersey, Newark

Summary not received

1:45 p.m. Eye Care in Haiti
A. PHILLIPS, JR., M.D., Resident, As-
sociated Eye Residencies of New
Jersey, Eye Institute of New Jersey,
Newark

Summary not received

2:00 p.m. Low Tension Glaucoma
THEODORE F. PEARLMAN, M.D., Res-
ident, Associated Eye Residencies of
New Jersey, Eye Institute of New
Jersey, Newark

Summary not received

**2:15 p.m. Diabetic Retinopathy; Current
Management**
PETER WALLIS, M.D., Cherry Hill;
Chief, Retina Service, Cooper Medi-
cal Center, Camden; and Department

of Ophthalmology, University of Pennsylvania, Philadelphia

Summary not received

- 2:30 p.m. Evaluation of Telescopic Spectacles**
GERALD FONDA, M.D., Shart Hills;
Director, Low Vision Rehabilitation
Service, Saint Barnabas Medical
Center, Livingston

Facts concerning FEINBLOOM 3x biaptric telescope for driving—The central magnified field is only 7° through which the depth perception is severely impaired because the objects appear closer, larger, and motion is magnified. The surrounding ring blind area of the telescope unit is 12° in diameter. The biaptric is of no value in the city traffic because the distances are too short to change fixation from the small field of the telescope, the carrier lens, and vice versa. The driver is unable to use the side or rear view mirror because of the 7° field of vision through the telescope. Binocular vision through the telescope is very difficult to obtain and to retain.

2:45 p.m. Business Meeting

3:00 p.m. Visit to Exhibits

Two Credit Hours
AMA Category I and MSNJ-CME

Sunday Afternoon, May 15

Otolaryngology

(Cosponsored by New Jersey Academy of Ophthalmology and Otolaryngology)

- 12 noon Luncheon—New Jersey Academy of Ophthalmology and Otolaryngology**
Reservations:
M. S. Klein
c/o Eye Institute
15 South 9th Street
Newark, 07107

- 1:00 p.m. Carcinoma of the Oral Cavity**
M. SOM, M.D., Clinical Professor of
Surgery, Mt. Sinai School of Medicine, New York

Summary not received

- 1:30 p.m. New Trends in Stapes Surgery**
ALAN AUSTIN SCHEER, M.D., Director of Otolaryngology, New York
Polyclinic Hospital, New York

Summary not received

- 2:00 p.m. Concepts in Problem Areas of Rhinoplasty**
DONALD WOOD-SMITH, M.D.,
Chairman, Department of Plastic Surgery, Manhattan Eye, Ear, and Throat Hospital; and Assistant Professor of Plastic Surgery, NYU, New York

Summary not received

2:30 p.m. Discussion

3:00 p.m. Business Meeting

3:15 p.m. Visit to Exhibits

Two Credit Hours
AMA Category I and MSNJ-CME

Inaugural Reception
May 15—6:30 p.m.

Inaugural Dinner
May 15—8 p.m.

(Tickets for each event on sale at
Registration Desk)

COFFEE LOUNGE
Exhibit Hall

Sponsored by
**The Prudential Insurance Company
of America**

Representatives will be available to answer
questions on Medicare and Medicaid

Sunday Afternoon, May 15

Plastic and Reconstructive Surgery

(Cosponsored by New Jersey Society of Plastic and Reconstructive Surgeons)

- 1:00 p.m. Subcutaneous Mastectomy with Reconstruction**
ROBERT M. GOLDWYN, M.D., Associate Clinical Professor of Surgery, Harvard Medical School, Boston

For premalignant disease of the breast and even for carcinoma *in situ*, subcutaneous mastectomy is a useful alternative to expectant observation, with its unpredictability, and to other types of mastectomy such as simple radical or modified radical with their deformity. Decisions on subcutaneous mastectomy involve proper patient selection, method and extent of subcutaneous mastectomy, timing of reconstruction—immediate or delayed—and technique of reconstruction, usually with an implant placed either below the skin or the pectoralis muscle. The patient and the surgeon must understand the limitations of this procedure with regard to ultimate appearance of the breast and protection from breast cancer.

- 2:00 p.m. Breast Reconstruction Following Simple and Radical Mastectomy**
RANDOLPH H. GUTHRIE, JR., M.D., Associate Professor of Surgery, Cornell University Medical College, New York

The advent of reliable, internal, mammary prostheses has made possible the modern era of breast reconstruction in the human female. The operation, when properly performed, is able, in most cases, to restore a normal or near-normal appearance of the breasts when contained in a brassiere or bathing suit. This report demonstrates the procedure and presents a number of representative cases.

3:00 p.m. Business Meeting

Two Credit Hours
AMA Category I and MSNJ-CME

Sunday Afternoon, May 15

Urology

- 1:00 p.m. Controversies in the Treatment of Carcinoma of the Prostate**
JOHN J. MURPHY, M.D., Professor and Chairman, Division of Urology, Department of Surgery, University of Pennsylvania School of Medicine, Philadelphia

There is considerable difference of opinion regarding the treatment of the patient with prostatic carcinoma. Several centers in this country have been long-time advocates of radical prostatectomy for lesions apparently confined to the gland, while other centers have been enthusiastic advocates of irradiation therapy for tumors of similar stage and grade. Urologists in the United Kingdom and Ireland rarely recommend surgery except for the relief of outlet obstruction and utilize mainly what we call palliative therapy. It is difficult to evaluate or compare various forms of treatment because of failure accurately to grade and stage the tumors. A plea is made for accurate staging and grading of this neoplasm and an ideal study to permit an honest evaluation and comparison is outlined.

- 2:00 p.m. Question and Answer Period**
2:45 p.m. Business Meeting
3:00 p.m. Visit to Exhibits

Two Credit Hours
AMA Category I and MSNJ-CME

Motion Picture Theater

Saturday, May 14, 2 p.m.
Sunday and Monday, May 15-16, 10 a.m. and 2 p.m.

Arranged and presented through the cooperation of
Roche Laboratories, Division of Hoffmann-LoRoche, Inc.

Monday Morning, May 16

Chest Diseases Medicine

(Cosponsored by New Jersey Chapter, American College of Chest Physicians and New Jersey Society of Internal Medicine)

**9:30 a.m. Symposium on Recent Advances in
Therapy of Carcinoma of the Lungs**

Newer Surgical Approaches

JAMES W. MCKENZIE, M.D., Chair-
man, Department of Surgery, CMDNJ
—Rutgers Medical School, Piscata-
way

Summary not received

10:00 a.m. Newer Concepts in Radiotherapy

LOUIS J. SANFILIPPO, M.D., Direc-
tor of Radiotherapy, Saint Barnabas
Medical Center, Livingston; and As-
sociate Clinical Professor, Albert
Einstein College of Medicine, Bronx,
N.Y.

Newer strategies in treatment of lung cancer in-
volve the use of "split-course" radiation techniques
combined with chemotherapy to enhance local
control and suppress distant metastases. Multiple
drug regimens have been employed for oat cell
carcinoma and bleomycin for squamous cell car-
cinomas, apparently with improved results.

Combined short course pre-operative irradiation for
pancoast tumors and selected borderline operable
lesions is also of value. Post-operative irradiation
for incompletely resected lung lesions or those with
regional nodal spread can prevent local recur-
rences and perhaps influence long-term survival.

Biological factors that influence local control with
irradiation such as tumor stage and bulk, histology,
and patterns of spread also will be reviewed.

**10:30 a.m. Recent Advances in Cancer Che-
motherapy**

BERNARD J. KOVEN, M.D., Chief,
Oncology Section, Hockensack Hos-
pital, Hockensack; and Associate
Professor of Clinical Medicine,
CMDNJ — New Jersey Medical
School, Newark

Incidence of lung cancer continues to increase in the
United States with a disproportionate rate of in-
crease in women who smoke. It was estimated that
63,500 males died of lung cancer in 1975 and
17,600 females. Despite refinements in surgery and
radiation therapy as single modalities of treatment,

the death rates from lung cancer still approximate
the annual incidence rates (81,100 deaths vs 91,000
new cases estimated for 1975). Epidemiologists are
now classifying lung cancer as Type I (squamous
cell and oat cell carcinomas, clearly carcinogen
related) and Type II (adenocarcinoma, alveolar
cell, large cell, and so on). Recent developments in
the chemotherapy of Type I lung cancers have
improved survival rates to varying degrees. Various
treatment regimens will be discussed.

11:00 a.m. Panel Discussion

11:30 a.m. Business Meeting

11:45 a.m. Visits to Exhibits

**12:30 p.m. Luncheon—New Jersey Chapter,
American College of Chest Phy-
sicians**

Annual Selman Waksman Lecture

Reservations:

C. Spencer Poisley, M.D.
501 White Horse Pike
Haddon Heights 08035

**Two Credit Hours
AMA Category I and MSNJ-CME**

Monday Morning, May 16

Clinical Pathology Obstetrics and Gynecology Surgery

(Cosponsored by New Jersey Chapter, American
College of Surgeons, New Jersey Obstetrical and
Gynecological Society, CMDNJ — New Jersey Medi-
cal School, Newark)

**9:00 a.m. Introduction and Report of the
New Jersey Breast Screening Pro-
gram**

BENJAMIN F. RUSH, JR., M.D., John-
san & Johnson Professor of Surgery.
Chairman, Department of Surgery,
CMDNJ — New Jersey Medical School,
Newark

The New Jersey Medical School, with the support of
the NIH and of the American Cancer Society, has
been conducting a breast screening clinic for the
past three years. A population of 10,000 women

has been screened annually. This report will deal with the initial results of the program, including some of the problems encountered with early diagnosis of breast cancer and some of the difficulties raised by the current objections to diagnostic x-rays in breast screening of asymptomatic women.

9:30 a.m. The Minimal Breast Lesion

ROBERT V. P. HUTTER, M.D., Director, Department of Pathology, Saint Barnabas Medical Center, Livingston; and Professor of Pathology (Adjunct), College of Physicians and Surgeons, Columbia University, New York

Summary not received

10:00 a.m. Adjuvant Therapy for Breast Cancer

RICHARD J. KAUFMAN, M.D., Associate Attending, Department of Medicine, Memorial Hospital for Cancer and Allied Diseases, New York

The controversy over what is the optimal surgical and/or radiotherapeutic approach to primary operable mammary cancer does not suggest that any method will guarantee cure for all patients. The failure to cure indicates that any local approach will not succeed if tumor cells have left the primary site before or during surgery. The hope to sterilize those cells which have escaped becomes the target of all adjuvant approaches—the most popular one at present is chemotherapy. A review of some completed trials, those in progress, and difficulties inherent in this therapy will be discussed.

10:30 a.m. Break

11:00 a.m. Choice of Surgical Procedure for Breast Cancer

JEROME A. URBAN, M.D., Associate Clinical Professor of Surgery, Cornell University Medical School; and Attending Surgeon, Memorial Sloan-Kettering Cancer Institute, New York

Any effective plan for the surgical treatment of operable breast cancer must be based upon its early, natural history. The multicentric origin of breast cancer has been documented recently. Regional lymphatic spread from the breast goes to two primary areas—the axilla and the internal mammary nodes. The risk of spread to the internal mammary nodes is twice as great for lesions presenting in the medial portion of the breast, and increases as the primary tumor approaches the sternal margin of the breast, and as axillary metastases increase. Extent of metastatic disease in the axillary nodes has a direct bearing on prognosis when these nodes are removed by en bloc excision.

There is no single, ideal operative procedure for all primary breast cancers. An attempt should be made to tailor the scope of the operative procedure, to correlate the clinical pathological extent of disease present in each individual patient with the primary aim of removing all disease present in the breast and regional nodes, while interfering least with appearance and function. Following this plan, and applying modified radical mastectomy, classical radical mastectomy, and extended radical mastectomy to the appropriate patients with infiltrating breast cancer between 1955 and 1964, we have treated 565 patients—40 percent of whom had axillary node involvement—with a 10-year survival rate of 61 percent, and local recurrence rate of 7 percent.

11:30 a.m. Report of Results of Questionnaire

ERIC J. LAZARO, M.D., Professor of Surgery, CMDNJ—New Jersey Medical School, Newark

A questionnaire on "Controversial Issues in the Management of Breast Cancer" has been circulated among the general surgeons who practice in the State of New Jersey. An analysis of the responses to this questionnaire will be presented. The results reflect to a great extent the attitude of general surgeons to important considerations in the management of patients with cancer of the breast.

11:45 a.m. Panel Discussion

Moderator:

BENJAMIN F. RUSH, JR. M.D.

Panelists:

ROBERT V. P. HUTTER, M.D.

JEROME A. URBAN, M.D.

HUMBERT L. RIVA, M.D., Acting Director, Obstetrics and Gynecology, St. Michael's Medical Center, Newark

12:30 p.m. Business Meeting

12:45 p.m. Visit to Exhibits

**Three Credit Hours
AMA Category I and MSNJ-CME**

Cozy Morley

Wing-Ding and Bash

Saturday, May 14, 7:30 p.m.

Cocktails—Dinner

**Cozy Morley—Singer, Comedian, Musician
Valley Forge Highland Band and Dancers
Dancing—Howard Reynolds Orchestra**

Monday Morning, May 16

Family Practice

(Cospnsored by New Jersey Academy of Family Physicians)

9:30 a.m. Symposium on Office Management of Urinary Tract Conditions

Moderator:

GEORGE L. TRIEBENBACHER, M.D.,
Sec'y., Section on Family Practice

Panelists:

PARVEZ MAHMOOD, M.D., Assistant Attending in Urology, Community Hospital, Toms River; and Clinical Instructor in Urology, New York University Medical Center, New York

The purpose of this presentation is to discuss the office management of common urinary tract infections. Subject matter will be discussed under the categories of pediatric, adult, and geriatric urinary tract infections. Simple guidelines will be established and danger signals will be stressed. It is hoped that the presentation will help the family practitioner in his day-to-day office management of common urinary tract infections.

MARTIN J. SCHOR, M.D., Assistant Attending in Urology, Poul Kimball Hospital, Lakewood

Stone disease persists in causing much time lost from work with its concomitant danger to functioning renal tissue and risks of systemic infection. Presented here is a systematic guide to office management and investigation of stone disease and its prevention—history, physical examination, laboratory and radiological investigation are described. Most studies are relatively inexpensive and simple and only a small percentage require surgical intervention.

11:30 a.m. Business Meeting

11:45 a.m. Visit to Exhibits

12 noon Luncheon Meeting—New Jersey Academy of Family Physicians

Speaker:

HAROLD KALLMAN, M.D., President

Reservations:

Mr. Arthur R. Ellenberger
144 So. Harrison St.
East Orange 07018

**Two Credit Hours
AMA Category I, MSNJ-CME and AAFP**

Monday Morning, May 16

Gastroenterology and Proctology Radiology

(Cospnsored by New Jersey Gastroenterological Society, New Jersey Chapter, American College of Radiology)

9:00 a.m. New Radiographic Techniques in Evaluation of GI Disease

ELLEN SILVERSTEIN, M.D., Assistant Attending in Radiology, Morristown Memorial Hospital, Morristown

Summary not received

9:30 a.m. A New Approach to Recurrent Abdominal Pain in Children

STEPHEN F. WANG, M.D., Chairman, Department of Pediatrics, Morristown Memorial Hospital, Morristown, and Assistant Clinical Professor of Pediatrics, CMDNJ—Rutgers Medical School, Piscataway

Proposed is an approach which has been found successful with the common perplexing problem of the child with recurrent abdominal pain. Rather than the traditional method of dividing abdominal pain into organic or psychosomatic, abdominal pain is described as either *structural* or *functional* in etiology. By structural we mean that an anatomical lesion (e.g., ulcer, ileitis) is present. Functional pain connotes a lack of anatomical or histological correlation (e.g., lactose intolerance, food allergy) but does not necessarily imply psychological etiology.

By relieving both the patient and his/her parents of anxiety concerning an anatomical lesion without stressing emotional factors at the onset, patients and their family are able better to deal with bouts of recurrent abdominal pain.

10:00 a.m. Endoscopic Retrograde Cholangiopancreatography

LAWRENCE STEIN, M.D., Assistant Attending in Gastroenterology, Saint Barnabas Medical Center, Livingston

Summary not received

10:30 a.m. Herniography

ROGER A. BERG, M.D., Associate Clinical Professor of Radiology, CMDNJ—New Jersey Medical School, Newark; and Attending Radiologist, Morristown Memorial Hospital, Morristown

Intraperitoneal injection of water-soluble contrast material is a fast, safe, and accurate diagnostic

study in the management problem of hernia and hydrocele patients. I have done the examination in over 50 patients in the past two years (almost always in children). The results have been reliable with no false negative or false positive cases so far. The technique of herniography is described. Examples of typical and unusual diagnostic problems and how they were solved by herniography are shown.

11:00 a.m. Discussion

11:30 a.m. Business Meeting

11:45 a.m. Visit to Exhibits

**Two and a Half Credit Hours
AMA Category I and MSNJ-CME**

Monday Morning, May 16

Neurosurgery and Neurology Orthopedic Surgery

(Cosponsored by New Jersey Neurosurgical Society and Neurological Association of New Jersey and New Jersey Orthopaedic Society)

9:00 a.m. Respiratory Effects of Anterior Cervical Spinal Surgery

ABBOTT J. KRIEGER, M.D., Professor and Chief, Neurological Surgery, CMDNJ—New Jersey Medical School, Newark; and Chief, Neurosurgery Section, Veterans Administration Hospital, East Orange

Ventilatory insufficiency and apnea are acknowledged complications of laminectomy and high cervical cordotomy. The importance of this observation is becoming increasingly apparent since the syndrome has been recognized not only after percutaneous cordotomy, but now in a variety of disease entities such as cervical spine fractures, crania-vertebral anomalies, advanced cervical spondylitis, and as a complication of cervical laminectomy or high anterior discectomy and fusion. The characteristic course of this syndrome begins with vague subjective sensations of lethargy and asthenia. The patient may complain specifically of an inability to get enough air. He may be confused. The importance of being aware of this clinical syndrome of respiratory dysfunction is that one may not suspect the precarious pulmonary status of the patient especially when the conventional parameters of respiratory insufficiency are normal.

9:30 a.m. Reconstruction of the Brachial Plexus After Trauma

RALPH LUSSKIN, M.D., Professor of Clinical Orthopedic Surgery; and Acting Chairman, Department of Orthopedic Surgery, NYU Medical Center, New York

Improved orthopedic and neurosurgical techniques now permit direct reconstruction procedures in some cases of brachial plexus injuries while improvements in classical orthopedic shoulder stabilization and pectoral muscle transfer have resulted in better salvage of some irreparable lesions of the proximal plexus. Four patients with lacerations or combined laceration-stretch injuries were reconstructed by cable autografts after lysis of adhesions and removal of neuromas. All four regained significant muscle function and sensation. Two patients regained useful elbow flexion and shoulder control following shoulder orthodesis and transfer of half of the pectoralis major. The principles of combined orthopedic-neurosurgical brachial plexus neurolysis and reconstruction will be reviewed and a short movie will demonstrate the results of autografting.

10:00 a.m. Coffee Break

10:30 a.m. Arm Pain and Gait Disturbance Due to Cervical Cord Compression

HENRY R. LISS, M.D., Clinical Associate Professor of Neurosurgery, CMDNJ—Rutgers Medical School, Piscataway; and Attending Neurosurgeon, Morristown Memorial Hospital, Morristown

Summary not received

11:00 a.m. Salvage Spine Surgery

RICHARD H. ROTHMAN, M.D., Associate Professor of Orthopaedic Surgery, University of Pennsylvania School of Medicine; and Director of Orthopaedic Surgery, The Pennsylvania Hospital, Philadelphia, Pa.

Sixty-eight of seventy-four multiple operated back patients with an original diagnosis of lumbar disc disease have been reevaluated at least one year after their most recent surgery, to correlate significant pre-operative and intra-operative parameters with ultimate outcome. Evaluation based primarily on pain relief demonstrated greater than 80 percent with subjective and objective acceptability. Predominant fibrosis portended a poor result in 55 percent of patients, in contrast to only 10 percent failures in the group with mechanical compression or instability. The presence of a pain-free interval lasting one year from the date of previous surgery correlated highly with the presence of surgically remediable pathology.

11:30 a.m. Business Meeting

11:45 a.m. Visits to Exhibits

12:30 p.m. Luncheon Meeting—New Jersey Orthopaedic Society

Reservations:

Poul J. Hirsch, M.D.

720 U.S. Highway 202—206

Bridgewater 08807

Two Credit Hours
AMA Category I and MSNJ-CME

the patient to the decisions of the Judicial Committee will be cited. It is hoped that the analysis of these typical cases will be of assistance in coping with problems of the doctor-patient relationship.

Panel Discussion—Questions and Answers

Two Credit Hours
AMA Category 1, MSNJ-CME, and AAFP

Monday Afternoon, May 16

Family Practice

(Cosponsored by New Jersey Academy of Family Physicians)

1:00 p.m. Symposium on "Consumer Complaints"

Moderator:

FRANK R. BEGEN, M.D., President-Elect, MSNJ, Teaneck

Panelists:

FREDERICK W. DURHAM, M.D., Haddonfield; Judicial Councilor from 4th District

Here is an opportunity for an expanded forum on the pinpointing of our shortcomings. What are the recurrent gripes against the generalist, the specialist? An exchange of physicians' criticisms of their colleagues and of how to upgrade our individual responsibilities toward the patient and toward each other will be encouraged.

The operative format of this session will be enhanced ideally if the entire audience becomes a potpourri of panelists with each item of consequential concern being exposed and expurgated.

MERTON L. GRISWOLD, JR., M.D.
Plainfield; Judicial Councilor from 1st District

The presentation will cover selected cases culled from the files of a County Judicial Committee. Some of the more common complaints will be summarized. How they were handled, what was the reply of the doctors who were concerned, and the reaction of

Monday Afternoon, May 16

Physical Medicine and Rehabilitation

(Cosponsored by New Jersey Society of Physical Medicine and Rehabilitation)

1:00 p.m. Symposium on Evaluation of Low Back Pain—Orthopedic Surgery Evaluation

ROBERT G. GREENE, M.D., Director, Department of Orthopedic Surgery, Mountinside Hospital, Montclair; and Clinical Associate Professor of Orthopedic Surgery, CMDNJ—New Jersey Medical School, Newark

A 10-year experience in the treatment of low back pain, including office and hospital orthopedic practice, is presented with statistical evaluation of common entities and illustrative cases on rarer causes of low back pain.

2:00 p.m. Neurosurgical Evaluation

GEORGE L. BECKER, JR., M.D., Attending in Neurosurgery, The Valley Hospital, Ridgewood; and Instructor in Neurosurgery, Columbia University College of Physicians and Surgeons, New York, N.Y.

Fundamentals of the neurological examination as it pertains to the low back will be stressed as a background to illustrate the important neurosurgical disorders encountered in our practice. Our experience with the newer modalities of pain relief and advanced operative techniques will be illustrated.

3:00 p.m. Business Meeting

Two Credit Hours
AMA Category I and MSNJ-CME

1977 Annual Meeting

INFORMATIONAL EXHIBITS

Saturday, May 14 — 12 noon to 5 p.m.

Sunday, May 15 — 9 a.m. to 5 p.m.

Monday, May 16 — 9 a.m. to 5 p.m.

A Speech and Hearing Center — Service to the Community I-201

MSNJ's Committee on Conservation of Hearing and Speech, Trenton

This exhibit will demonstrate the wide range of services available to individuals and to the community through the speech pathologist and audiologist in the Speech and Hearing Center. Vividly illustrated for the physician will be the broad and comprehensive program administered for a population extending from infancy through geriatric. Topics of general interest will include: (a) the importance of screenings in the preschool population; (b) the impedance bridge as a useful diagnostic tool; (c) therapeutic consideration of voice disorders by the speech pathologist; and (d) speech and language learning for the hearing-impaired child.

Academy of Medicine of New Jersey I-202

Union

The exhibit will outline the activities of the Academy of Medicine in providing continuing education programs for the physicians of New Jersey during the past year.

Widows and Orphans Society I-203

Hopewell

"W. & O.," established in 1882, is a voluntary non-profit organization, founded and continuously operated by physicians of New Jersey to provide for the welfare of widows and children of deceased member-physicians.

Medical Education in New Jersey I-204

CMDNJ — New Jersey Medical School, Newark; and CMDNJ — Rutgers Medical School, Piscataway

Purpose of the exhibit is to provide New Jersey's medical community with current information about the State's only medical college, its programs, admissions, research, and curriculum, and its various units, which include the CMDNJ — Graduate School

of Biomedical Sciences, School of Allied Health Professions, continuing professional education, and consumer health education.

American Diabetes Association, New Jersey Affiliate, Inc. I-205

Hackensack

A nine-part portable, free-standing exhibit with stainless steel framing which was used at the 1976 Medical Society convention in Cherry Hill will display new material. Its purpose is to acquaint physicians with the services offered by the A.D.A., including the programs and other information on juvenile diabetic camps.

Disability Under the Social Security I-206

Division of Disability Determinations, New Jersey State Department of Labor and Industry, Newark

The exhibit describes important aspects of disability examination under the Social Security regulations.

JEMPAC (Jersey Medical Political Action Committee) I-207

Trenton

Information on political action for physicians will be available.

Garden State Rehabilitation Hospital I-208

Toms River

Educational tour of the hospital and services provided therein via video-tape will be presented.

New Jersey Foundation for Health Care Evaluation I-209

Trenton

Purpose of the exhibit is to define the role and accomplishments of the New Jersey Foundation for Health Care Evaluation and the Statewide PSRO Support Center.

1977 Annual Meeting

SCIENTIFIC EXHIBITS

Saturday, May 14 — 12 noon to 5 p.m.

Sunday, May 15 — 9 a.m. to 5 p.m.

Monday, May 16 — 9 a.m. to 5 p.m.

Circulatory Status, Pre-Operative Risk and Peri-Operative Mortality S-101

Joseph D. Cahn, M.D., Louis R. M. Del Guercia, M.D., Malcolm Cablentz, M.D., Ruplanak Gaurishankar, M.D., and Joseph Cax, M.D., Saint Barnabas Medical Center, Livingston

Pre-operative assessments of hemodynamic, oxygen transport and metabolic functions provide a means to define anesthetic risk status. Unsuspected impairment in circulatory function was documented in 36 percent of high-risk patients evaluated prior to planned, elective, surgical procedures. Anesthetic risk status and mortality correlate with preoperative hemodynamic and oxygen transport assessments. Pre-operative evaluation of circulatory function in high-risk patients provides documentation of the severity of cardiovascular impairment, allows appropriate review of planned intervention, and defines hemodynamic parameters to be monitored in the peri-operative period.

Community Advanced Life Support Systems — Heart Rescue and Comprehensive Emergency Medical Care S-102

Michael D. Yablonski, M.D., Hackensack Hospital, City of Hackensack, Hackensack Fire and Volunteer Ambulance Squads, Bergen County Heart Association, Hackensack Heart Rescue Team

The results of over three years' experience in heart rescue in a community hospital (over 1300 patients) will be presented. Organization and team approach are described and outcome is discussed. Evolution of heart rescue into a total community advanced life support system utilizing New Jersey State Certified EMT II Paramedics linked to hospital by UHF telemetry is described.

Gas-Forming Infections S-103

H. Stephen Fletcher, M.D., Margaret Skiles, M.D., and Joseph Cahn, M.D., Saint Barnabas Medical Center, Livingston

This exhibit illustrates the coordinated sequential management of gas-forming infections. Following the initial diagnosis, aggressive management, including extensive debridement, should be undertaken before transfer to a hyperbaric facility. Early debridement rather than merely the opening of the

wound is essential. Diabetes, renal failure, and hemolysis are grave prognostic indicators. An analysis of some 21 cases is reviewed.

Operative Evaluation of Intestinal Viability and Mesenteric Blood Flow by Doppler Ultrasound S-104

Robert W. Habsan II, M.D., Creighton B. Wright, M.D., Kenneth G. Swan, M.D., and Joseph A. O'Donnell, M.D., East Orange VA Hospital and CMDNJ—New Jersey Medical School, Newark.

Purpose of the exhibit is to display usefulness of the Doppler ultrasound device for operative evaluation of intestinal viability and mesenteric blood flow in elective abdominal vascular procedures and emergency operations for mesenteric ischemia or strangulated intestinal obstruction. Method: Data from canine model of intestinal ischemia as well as from over 100 elective and emergency abdominal procedures in man will be presented confirming the correlation between Doppler flow over the mesentery and serosal surface of the bowel and intestinal viability. Conclusion: The Doppler ultrasound device is recommended to assist the surgeon in predicting intestinal viability and the requirement/limit of intestinal resection in elective and emergency abdominal operations.

Crossover Femoro-Femoral Grafts S-105

Danald K. Brief, M.D., Bruce J. Brenner, M.D., Joseph Alpert, M.D., and Victor Parsannet, M.D., Newark Beth Israel Medical Center, Newark

Femoro-femoral grafts are indicated in patients with unilateral ilioac artery occlusions. These grafts remain patent despite the fact that they cross two joints, are of synthetic material and frequently have run-off limited to the profunda femoris artery. Exhibit includes x-ray, medical art, demonstrated procedure, and results.

High and Low Velocity Gunshot Wounds — Ballistics and Surgical Therapy S-106

Kenneth G. Swan, M.D., Christine E. Haycock, M.D., and Robert W. Habsan II, M.D., CMDNJ—New Jersey Medical School, Newark

Ballistic properties of small arms (M-16—32-calibre rifle, 45—32-calibre pistol) are compared

using high-speed photography of impacts on simulated tissue (gelatin and clay blocks) to demonstrate: (1) cavitation; (2) suction; (3) foreign body; (4) secondary missile effects on man. Based on these findings, surgical therapy of actual gunshot wounds acquired in Vietnam and in the United States are presented to reinforce the need for debridement.

The Use of Pedicle Flaps in Head and Neck Surgery S-107

M. J. Shapira, M.D., K. Han, M.D., H. E. Hack, M.D., A. Paet, M.D., and J. LaBagnara, M.D., CMDNJ, Section of Otolaryngology, Newark Eye and Ear Infirmary, Newark

Pedicle flaps represent an indispensable modality in the surgical treatment of head and neck tumors. They find their greatest use in the reconstruction of extensive surgically created defects. A brief pictorial summary of our experience with pedicle flaps is presented in this display.

Fluorescein Angiography as a Diagnostic Aid S-108

Peter Nussbaum, M.D. and Muriel Laban Nussbaum, BPA, Eye Institute of Saint Barnabas Medical Center, Livingston

Angiography of the ocular fundus following the intravenous injection of sodium fluorescein solution is a valuable aid to the ophthalmologist in diagnosing both vascular and pigmentary retinal abnormalities, even some not visible through the ophthalmoscope.

Three Diagnostic Challenges: Left Atrial Myxoma; Sarcoid of the Lung; Pseudoaneurysm of the Left Ventricle S-109

K. Chang, M.D., R. Cuasay, M.D., J. Fernandez, M.D., M. Feierstein, M.D., S. S. Yang, M.D., Sumathisen, M.D., J. Shapira, M.D., V. Maranhao, M.D., H. Goldberg, M.D., A. Gaach, M.D., P. Kini, M.D., G. Lemale, M.D., D. Marse, M.D., and N. Ralph, M.D., Deborah Heart and Lung Center, Browns Mills

The exhibit shows the clinical, radiological, echocardiographic, operative, and gross and microscopic pathologic findings in three relatively rare chest diseases that represent diagnostic challenges. X-rays, microscopic slides, movies of operation, and so on, will be shown sometimes simultaneously on a translucent screen with projectors behind it.

Desquamative Interstitial Pneumonia (D.I.P.) S-110

Joseph W. Sakalowski, Jr., M.D., William V. Harrer, M.D., Barry A. Aikey, M.D., John F. McCarmack, M.D., and Francisca Enriquez, M.D., Our Lady of Lourdes Hospital, Camden

Desquamative Interstitial Pneumonia (D.I.P.) initially described in 1965, is seen with increasing frequency with other pathologic entities, as well as independently. Radiographic presentations are variable and include on occasion pleural effusion and normal roentgenographic studies.

A Commonly Unrecognized Clinical and Radiological Entity CPPD (calcium pyrophosphate deposition disease) S-111

Edward G. Mass, M.D. and Sheldon D. Salaman, M.D., Cooper Medical Center, Camden

Purpose of this exhibit is to make available data concerning the entity CPPD (also called pseudo-gout or chondrocalcinosis). The exhibit will demonstrate the discovery of this entity and its clinical findings. Four case reports will include the pertinent findings and demonstrative radiographs. Photographs of calcium pyrophosphate crystals in joint fluid and aspiration techniques will be shown. X-ray abnormalities will be described and a listing of diseases commonly associated with CPPD will be shown. Our conclusions are that this common disease process, CPPD, is often missed clinically and radiographically. Misdiagnosis is often made in differentiation to such diseases as septic arthritis, gout, rheumatoid arthritis, and/or osteoarthritis.

Most Useful Visual Aids for Low Vision and Bioptic Telescope S-112

Gerald Fanda, M.D. and Lais Fanda, B.S., Saint Barnabas Medical Center, Livingston

Simplification of prescribing low vision aids showing most complicated and most expensive aids are frequently the least useful. Aids will be available for inspection, including bioptic telescope for driving.

Comprehensive Management of Epilepsy S-113

Samuel Livingston, M.D., Lydia L. Pauli, M.D., Irving Puce, B.S., Herbert L. Livingston, D.D.S., and Sumia Uematsu, M.D., Baltimore, Md.

The data presented in this exhibit are based on direct clinical observations, EEG examinations and intimate follow-up studies of approximately 32,000 epileptic patients over the past four decades. The following aspects of epilepsy are displayed by means of photographs, drawings, and printed material on colored panels: classifications of epileptic seizures; general principles of drug therapy; specific drug therapy for epilepsy; dietary treatment of epilepsy; surgical treatment of epilepsy; use of the EEG in epilepsy; status epilepticus; cutaneous reactions of anti-epileptic drugs; phenytoin gingival hyperplasia; anticonvulsant drug blood levels; initiation of treatment with one drug; febrile

convulsions; precipitants of epileptic seizures; behavioral and personality aberrations; socioeconomic guidance. Detailed information concerning most subjects will be available in pamphlet form for distribution at the exhibit booth.

Ultrasonic Evaluation of Hepatobiliary Disease S-114

Ira Berger, M.D., Frank Wald, M.D., and Thomas Witamski, M.D., New Jersey Institute of Ultrasound in Medicine, Union

Diagnostic ultrasound has many applications in hepatobiliary disease evaluation. This non-invasive technique is demonstrated by clinical studies from three community hospitals. Correct prediction of intrahepatic causes of jaundice versus extrahepatic or cholestatic disease is achieved. Various liver pathologies including hepatic metastases, hepatoma, and benign cysts can be differentiated. Gall bladder disorders such as hydrope, Courvoisier gall bladder, and cholelithiasis can be diagnosed with a high degree of accuracy.

Improved Stoma Care S-115

Dave B. Swerdlow, M.D., Pat Martin, R.N.E.T., and Trudy Burns, R.N.E.T., Stoma Care Center, Montclair

Ostomates may find themselves facing problems of cost, protrusion, inconvenience or the lack of an appliance with all stores closed on a long holiday. This exhibit will show (1) a low cost security pouch system for the well regulated end sigmoid colostomy, (2) step-by-step method of constructing a functional appliance from simple materials found at home or among the usual supplies of an ostomate, (3) simple devices created by ostomates.

New Jersey Sudden Infant Death Syndrome Program S-116

Patricia Darsa, M.S.N., Coordinator, SIDS Program, New Jersey State Department of Health, Trenton

The purpose of the New Jersey Sudden Infant Death Syndrome Program exhibit is to present the concept of the mental health aspects of SIDS. The exhibit shows the psychological impact of SIDS on families, the need of SIDS parents for information and counseling services, and a perception of the grief process. The conclusion, which hopefully will be reached, is that the experience of SIDS can lead to

positive changes in individual and family growth, if adequate support exists both within the family and from outside agencies and professionals.

Controversies in Breast Cancer: Our Answers! S-117

Frederick B. Cahen, M.D., Newark Beth Israel Medical Center, Newark

The various decisions to be made in managing a patient with breast cancer will be discussed. All stages from early diagnosis to advanced disease will be shown—with questions and alternatives presented and our choices illustrated.

Women, Infants and Children's Supplemental Food Program (WIC) S-118

Linda Barr Gale, M.S., State WIC Coordinator, New Jersey State Department of Health, Trenton

The New Jersey State WIC exhibit will include the following: a general description of the program; models of foods and an analysis of their nutrient value; an explanation of the nutritional and medical eligibility criteria for enrollment in WIC; the design for the private physician referral system; and goals, objectives, and samples from the statewide nutrition education program.

Tay-Sachs Disease S-119

Laird G. Jackson, M.D., Jael D. Sakaloff, B.A., and Warren Cahen, B.S., Jefferson Medical College, Philadelphia, Pa.

The exhibit describes Tay-Sachs disease and its prevention through community screening programs. Its purpose is to acquaint physicians with the screening program, and to provide them with sufficient information so they effectively can advise their patients.

A Practical System of Surveillance of Hospital-Associated Infections S-120

Dominic A. Mauriella, M.D., Jean Zadroga, R.N., and Marie Klimovich, R.N., Jersey City Medical Center, Jersey City

This exhibit describes the various methods of surveillance of hospital-associated infections in a community hospital; our experiences are presented with an analysis of the relative value and importance of these methods.

Governor's Conference — 9 a.m., May 14

Ectopia Lentis

S-121

Alfanse Cinatti, M.D., Anthony Caputo, M.D., and Edward Guilfay, M.D., CMDNJ-New Jersey College of Medicine, Newark

Ectopia lentis is a positive aphthalmic finding in many metabolic diseases. Its clinical presentation along with a flow chart for diagnosis of each particular disease is presented as one other clinical findings present in the syndromes.

Local Repair of Hernia

S-122

Horald M. Bruck, M.D., The Valley Hospital, Ridgewood

Techniques of local anesthesia to repair inguinal and epigostic hernia are established but not widely practiced. An early experience with fifty cases at The Valley Hospital, Ridgewood, is reviewed. Major advantages include immediate ambulation, minimal postoperative pain, and significant decreases in length of stay and hospital cost. Average length of stay for adult hernia repair under local anesthesia in this series was 2.8 days as compared to a statewide average length of stay for all hernias of 5.1 days. Complications and their avoidance, including one wound hematoma and two recurrences are discussed. The anatomy and physiology of hernia and the techniques and advantages of local hernia repair are illustrated.

Roentgen of the Day — "Pediatrics"

S-123

Jerame H. Rusaff, M.D., Kenneth H. Sall, M.D., and Geargene B. McKenzie, R.T., CMDNJ-New Jersey Medical School, Newark and Jersey City Medical Center, Jersey City

Selected x-rays and pertinent brief histories of stimulating pediatric cases will be exhibited to challenge your diagnostic acumen. A single diagnosis is required. Answers and a description of the roentgen findings, as well as important clinical and pathologic data of the diagnosis will be shown the next day. Ribbon awards will be given to the winners.

Roentgen of the Day — "Adult"

S-123

Jerome H. Rusaff, M.D., David G. Ospralenk, M.D., Adom Lande, M.D., and Donald G. Thurstan, R.T., CMDNJ-New Jersey Medical School, Newark and Jersey City Medical Center, Jersey City

Different challenging cases, with brief significant histories and clinical findings leading to a single diagnosis, will be presented daily. The answer, with supporting x-rays and clinical or pathologic

findings, will be given the next day. Physicians with correct diagnosis will be rewarded and their names posted.

Ultrasound ("Echo") of the Day

S-124

Jerame H. Rusaff, M.D., Ravindra V. Ginde, M.D., and Charles Schneider, B.S., CMDNJ-New Jersey Medical School, Newark and Jersey City Medical Center, Jersey City

Utilizing the tradition of an excellent teaching and learning method, basic ultrasound "echo" cases will be presented. A short history and clinical findings will be given. A single diagnosis is requested. The next day the correct pathologic answer, with pertinent explanatory information, will be shown. Prizes will be awarded and the winning physicians' names will be posted daily.

Nuclear Image of the Day

S-124

Melvin H. Freundlich, M.D., Crisastama V. Lacana, M.D., and Sherry A. Lee, B.A., R.T.N.M., CMDNJ-New Jersey Medical School, Newark and Jersey City Medical Center, Jersey City

Each day there will be presented an interesting nuclear medicine imaging study. Appropriate history and supporting data will be discussed pertinent to making a diagnosis. Films will be available upon which to make a diagnosis, and following each day's presentation ribbons will be awarded to persons making the correct diagnosis. Discussions of the study, with differential diagnosis and correct diagnosis, will be presented.

Percutaneous Removal of Retained Biliary Stones

S-125

Jefferson Bostidos, M.D., Mrugendra Mehta, M.D., and William E. Matthey, M.D., Saint Barnabas Medical Center, Livingston

Exhibited will be infusion techniques for dissolving biliary stones, mechanical methods for the removal of retained biliary stones, and audio-visual description of technique and case presentation.

Male Hypogonadism

S-126

Herbert S. Kupperman, M.D., Iven S. Young, M.D., and Cynthia Vaughan, R.N., New York University Medical Center, New York

Various endocrinopathies are associated with male hypogonadism. A logical sequence of diagnostic tests has been devised to determine the precise site of the defect within the hypothalamic-pituitary-testicular axis. The appropriate therapy for each endocrinopathy is suggested.

1977 Annual Meeting

TECHNICAL EXHIBITS

Saturday, May 14

Sunday, May 15

Monday, May 16

12 noon to 5 p.m.

9 a.m. to 5 p.m.

9 a.m. to 3 p.m.

MSNJ is pleased to recognize, through their generous contributions, the following patrons of the educational programs presented through the scientific sessions:

Mead Johnson Laboratories

Smith, Kline & French Laboratories

American Association of Medical Assistants, State of New Jersey, Inc. Message Center

AAMA is a professional national organization whose sole aim is to prepare the medical assistant as the best in her field thus enhancing the practice of the physician for whom she works. This is accomplished by setting standards for certification in administrative, clinical and/or pediatric specialties, offering educational programs and seminars. Brochures will be available at the booth.

The Message Center Booth, sponsored by AAMA, State of New Jersey, Inc., relays messages for physicians attending this Convention.

Anthropometrics #39

Anthropometrics, Inc. has five divisions providing cardiac medical services to hospitals and physicians. *Cardiac Long-Term Monitoring* supplies all equipment and training necessary to conduct Holter monitoring with a mail, telecopier, or courier service for 24-hour tape analysis. *Cardiac Pacemaker Evaluation Service* provides follow-up for patients with permanently implanted pacemakers via trans-telephonic EKG. *Complementary Coronary Care* is an on-site stress testing and cardiac rehabilitation program. All equipment, personnel training, and software items are provided for hospitals at no capital expense. *Anthropometrics Heart Clinic* has a staff of cardiologists who provide cardiovascular stress testing and cardiac rehabilitation on a physician referral basis. *Medical Research and Product Development* offers cardiac medical supplies, in cooperative purchasing plan, to hospitals and physician members.

Aquatherm Products Corp. #30

The Aqua-Pedic Floatation Mattress is a lightweight, water mattress that installs on ordinary hospital beds. The mattress prevents and treats decubitus ulcers, as well as providing comfort for the patient confined to bed. Extreme low cost and patented construction makes this the most effective, inexpensive floatation device. The Aqua-Seat Floatation Pad, which provides extreme comfort as well as therapeutic effects, is available for wheelchair patients.

Ayerst Laboratories #29

Our representatives look forward to a visit with you, and the opportunity to discuss the Ayerst products and services of interest to you.

E. & W. Blanksteen Agency, Inc. #11 & #12

E. & W. Blanksteen Agency, Inc., is the official broker for The Medical Society of New Jersey for Accident and Health, Major Expense, High Limit Accident, Term Life Insurance, Hospital-Money, The Overhead Expense Plan, HR-10 Keogh Retirement Plan and Corporate Master Retirement Plan. All of these programs provide exceptional value for the members because of the group purchasing power of the State Society.

Blue Shield of New Jersey #10

In 1976 Blue Shield of New Jersey, a non-profit medical-surgical plan serving more than half New Jersey's population, had the greatest number of

"participating physicians" in its thirty-four year history. Some 10,000 physicians now participate in its Series 500/750 Fee Program and more than 8,700 participate in its Usual, Customary or Reasonable (UCR) Fee Program.

For prompt handling of telephone inquiries from participating as well as non-participating physicians, Blue Shield now has five Physician Relations Inquiry Units in New Jersey—in Pomona, Newark, Boiling Ridge, Princeton and Cherry Hill.

Boehringer Ingelheim Ltd.

#5

Products on display will be: Cotopres® (clonidine hydrochloride), a central-acting antihypertensive in tablets of 0.1 and 0.2 mg.; Combipres® .1 and .2, a diuretic/antihypertensive combination for patient convenience—each tablet contains (Cotopres® (clonidine hydrochloride) 0.1 or 0.2 mg. and chlorthalidone, 15 mg.; Alupent® (metoprolol sulfate), a beta adrenergic bronchodilator for bronchial asthma and reversible bronchospasm of bronchitis or emphysema—MDI, tablets, and cherry-flavored syrup; and Serenite® (mesoridazine) as the besylate, a major tranquilizer for schizophrenia, psychoneuroses, behavioral problems in mental retardation and chronic brain syndrome, and alcohol withdrawal—metabolite of thioridazine in IM ampuls, concentrate, and tablets of 4 dosage strengths.

Burroughs Wellcome Co.

#17

Representatives of Burroughs Wellcome cordially invite you to visit our exhibit to view the display of ethical pharmaceuticals. We will be pleased to answer your inquiries on all of our products.

Cooper Laboratories, Inc.

#1

Cooper Laboratories is the manufacturer of the following cardiovascular and pulmonary products:

Quinaglute® (quinidine gluconate), a proven low-dosage, long-acting, antiarrhythmic.

Koy Ciel® elixir and powder, potent potassium chloride supplements for the treatment and prevention of hypokalemia and/or digitalis intoxication.

Elixophyllin® (theophylline) elixir and capsules, single entity bronchodilators for the treatment of emphysema and asthma.

Cooper Laboratories also will provide information on its new compliance program.

Encyclopaedia Britannica

#13

Encyclopaedia Britannica welcomes members and guests to the 211th Annual Meeting of The Medical Society of New Jersey. As part of our exhibit, we will have on display the revolutionary new Encyclopaedia Britannica 3, The Britannica Junior, Great Books of the Western World, and other related products. Stop and inspect our products; they are available to the members and guests of the exhibit booth.

C.B. Fleet Company, Inc.

#37

C.B. Fleet Company will display its complete line of pharmaceutical products, including Fleet Enema, Fleet Children's Enema, Fleet Mineral Oil Enema, Fleet Bisacodyl Enema and Fleet X-Ray Prep Kits.

Gibraltar Securities Co.

#43

Gibraltar Securities Co. is one of the largest dealers in tax-free municipal bonds in the Metropolitan area. We maintain a constant inventory of current offerings with a variety of maturity dates available. Our salesmen all have the necessary experience to discuss and recommend the proper portfolio to fit your individual requirements.

We offer the following services: (1) evaluations (past and current), (2) tax trading, (3) bids on bonds, (4) portfolio analysis, and (5) general market information.

Group Health Incorporated

#44

The GHI exhibit will present information on health insurance programs.

Hoechst-Roussel Pharmaceuticals, Inc.

#40

The Hoechst-Roussel exhibit will feature the following products: Losix®, Surfok®, Dixidon®.

Johnson & Johnson

#19

Featured in the Johnson and Johnson exhibit will be Sundown Brond® sunscreen, Retin-A Brond® tretinoin (prescription product for acne), and Micon-Tin Brond® miconazole (prescription product for fungal infections).

David & Charles Levinson

#28

Products to be displayed are:

Medco Dublett-Duol Ultrasound with palm-fitted transducers. Trigger points and symptom areas treated with two sound heads.

Meda-Sanlata Twin 50: A diagnostic and therapeutic modality with pulsed sound and smooth Medcolata current, synchronized. Continuous, pulse, and surge settings.

Medco-Sonlata 200: New modality with EMS control meters, plus all features of the Twin.

Medcatherm: Moist heat with neuromuscular stimulation thermostatically controlled.

Microwave and shortwave diathermy: Automatic tuning and deep penetration.

Biofeedback and TNS.

E.K.G. battery operated or plug-in.

Mallinckrodt, Inc. #38

Mallinckrodt Pharmaceutical representatives will be discussing the actions, indications, contraindications and dosages of their line of antihypertensives, bronchodilators and cough/allergy products. Specific products will be Lufyllin®, Lufyllin®-GG, Aquatensen®, Diutensen®, Diutensen®-R, Unintensen®, Rynatan®, Rynatuss®. In addition Ryna-C®, Mallinckrodt's newest product will be featured. Ryna-C® contains three ingredients proved effectively to treat coughs associated with common colds and symptoms associated with allergic rhinitis.

Marion Laboratories, Inc. #16

Let us introduce you to the most recent product in our nitroglycerin family—Nitra-Bid® (nitroglycerin 2%) ointment. Let us show you how the specially designed applicator helps your patient apply the ointment safely and accurately. We'll explain how you can use Nitra-Bid® ointment as an adjunct in treating patients with angina pectoris.

McNeil Laboratories, Inc. #47

McNeil Laboratories, Inc., will feature information on Talactin® (talmetin sodium) tablets, an important drug for relief of inflammation and pain of rheumatoid arthritis; and Tylenal® with codeine tablets and elixir, combining codeine and the non-salicylate analgesic-antipyretic acetaminophen.

Medical Arts Bureau, Inc. #49

Medical Arts Bureau, Inc., has been in business for the past 18 years in the State of New Jersey. We have specialized in anesthesiologists' billing and recently have expanded the operation to cover all

specialties. We are a professional bookkeeping and billing service and offer computerized billing plus the advantage of having all third-party insurance forms prepared on a computer with a 72-hour return from Blue Shield, Medicare, and Medicaid via the "tape-to-tape" process. This is a tremendous boost to your cash flow; you no longer have to wait the normal six to ten weeks for payment. We have offices throughout the state and can provide many references upon request.

Medical Inter-Insurance Exchange of New Jersey #48

The Medical Inter-Insurance Exchange of New Jersey is a reciprocal, or inter-insurance exchange, organized under the provisions of Chapter 50, Title 17, of the New Jersey Statutes. A reciprocal, or inter-insurance exchange, is an unincorporated association controlled by its members.

The members of the exchange, acting through a designated attorney-in-fact, "exchange" insurance contracts among themselves. The members are thus the policyholders, insuring each other. Premium deposits and contributions by members to surplus provide a pool of assets from which claims against the members (to the extent covered by the contracts of insurance) and expenses of the exchange may be paid.

Subject to the general supervision of the Board of Governors of the Exchange, the affairs of the Exchange will be managed by an attorney-in-fact. The Exchange has entered into an Agreement—Power of Attorney with New Jersey State Medical Underwriters, Inc., a New Jersey corporation, pursuant to which the Underwriter will act as attorney-in-fact for and manage the Exchange on a cost-reimbursement basis.

The Underwriter is a newly organized corporation, all of whose outstanding capital stock is owned by The Medical Society of New Jersey, and is located at 3131 Princeton Pike, Lawrenceville, New Jersey 08648. The Society organized the Underwriter and, together with the New Jersey Association of Osteopathic Physicians and Surgeons, has sponsored the organization of the Exchange to provide professional liability insurance and office premises' liability insurance to physicians licensed to practice medicine and surgery in the State of New Jersey.

Medical Plastics Laboratory, Inc. #31

The life-sized, three-dimensional reproductions produced by Medical Plastics Laboratory have proved

to be among the finest practice aids ever offered to the medical, dental, legal, and teaching professions. Doctors use them extensively to save time in complicated explanations of treatment and therapy, freeing them to see more patients, and aiding in the patients' understanding of problems involved.

**New Jersey
Bell Telephone Co.**

#6 & #7

Telephone services and equipment available for the medical profession will be illustrated and explained at the exhibit booth.

**Paul Revere
Life Insurance**

#8

The Paul Revere Company is a leader in the field of loss of income insurance. Although primarily known for its disability insurance products, the Paul Revere also provides many other financial services. These services include estate planning, professional incorporation feasibility studies and services, and a full range of qualified pension and profit sharing plan services. This wide range of financial services will provide to potential clients the ability to make intelligent decisions regarding future financial planning.

Physicians Planning Service Corp.

#32

Physicians Planning Service is celebrating its fifteenth year of providing economic and financial services to over 115,000 physicians and dentists throughout the United States.

PRO Services, Inc.

#36

Pro Services, Inc. offers prototype retirement plans — IRA-Keogh-Corporate — to members. These plans feature:

Brood Investment Options — You choose your own investment alternatives.

Segregated Accounts — Employers avoid investment responsibility for employees.

ERISA Compliance — Assistance with reports under the new pension law.

Corporate Trustee — Full record keeping.

Expert Service — PRO services more than 4,000 retirement plans.

Information — PRO Services, Inc., 1107 Bethlehem Pike, Flourtown, Pa. 19031 — (215)-836-1300

**Prudential Insurance
Company of America**

Coffee Lounge

Prudential is contractor with the Federal Government for Medicare Part B in New Jersey, North Carolina, and Georgia, and for Part A in New Jersey. We are also contractor with the State of New Jersey for Medicaid.

Reed & Carnick Pharmaceuticals

#21

Reed & Carnick, serving the medical profession for over 100 years, produces a line of well-established specialty items which are leaders in the fields of gastroenterology, gynecology, proctology, and dermatology. Some of our products on display will be Trichotine[®], Proctofoam HC[®] and N/S[®], Phazyme[®], and Kwell[®].

A.H. Robins Company

#26

You are cordially invited to visit the A.H. Robins exhibit and meet our representatives who will welcome the opportunity to discuss products of interest with you.

Roche Laboratories

#23 & #24

Pharmaceutical products and original research in medicine and chemistry will be exhibited.

Sandoz Pharmaceuticals

#15

Sandoz Pharmaceuticals cordially invites you to visit our display at booth #15, where we are featuring Mellaril[®], Hydergine[®], and Sonorex[®]. Any of our representatives in attendance will gladly answer questions about these and other Sandoz products.

Searle Laboratories

#14

Searle Laboratories is the manufacturer of Aldactozide[®], Aldactone[®], Lomotil[®], Pro-Banthine[®], Metomucil[®], Ovulen[®], Demulen[®], Enovid[®], Flagyl[®], Dromamine[®], Cu-7[®], and other products of Searle Research. Our medical representatives are prepared to discuss these products, answer your questions and provide materials for you and your patients. Our representatives look forward to seeing you in your office and also at the 211th Annual Meeting of The Medical Society of New Jersey.

**Donald F. Smith
& Associates**

#25

Information will be available on a MSNJ-sponsored, new group major medical program for doctors and their families, and on the statewide Blue Cross-Blue Shield program for members, their families, and their employees.

**Stuart Pharmaceuticals,
Division of ICI United States, Inc. #20**

Stuart Pharmaceuticals welcomes members and guests of The Medical Society of New Jersey. We extend a cordial invitation to visit our exhibit featuring graphic displays and literature for our major products: Mylanta®, Mylanta II®, Sarbitrate®, Mylicon-80®, Dialase®, Dialase Plus®, Effersyllium®, Kinesed®, Stuart Prenatal®, and Stuart-natal 1+L®. Our representatives will be glad to answer any questions on Stuart products and accept sample requests.

Systemedics, Inc. #33

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211th ANNUAL MEETING – THE MEDICAL SOCIETY OF NEW JERSEY

May 14-17, 1977

Reservation Desk, Chalfonte-Haddon Hall, Atlantic City, New Jersey

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	Side Ocean View <input type="checkbox"/> 34 <input type="checkbox"/> 35	<input type="checkbox"/> 36 <input type="checkbox"/> 37 <input type="checkbox"/> 39	<input type="checkbox"/> 26	<input type="checkbox"/> 31
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50th ANNUAL MEETING

Woman's Auxiliary to The Medical Society of New Jersey

Saturday through Tuesday
May 14-17

Cholfonte-Haddon Hall
Atlantic City

Registration — Lobby Floor, Haddon Hall

Saturday, May 14 — 12 noon to 4:30 p.m.

Sunday, May 15 — 9:30 a.m. to 4:30 p.m.

Monday, May 16 — 8:15 a.m. to 4:30 p.m.

Schedule of Events

Saturday, May 14, 1977

- 12 noon — Registration Opens
- *12 noon — Golden Merit Award Ceremony
- 1:00 p.m. — Registration for Art Show
- *6:30 p.m. — 2nd Annual Crazy Morley
Wing-Ding and Bash

Sunday, May 15, 1977

- *7:15 a.m. — 1st Annual Prayer Breakfast
- 9:30 a.m. — Art Exhibit
County Press and Publicity Exhibit
County Activities Pictorial Display
- 10:00 a.m. — Pre-convention Board Meeting
- 11:15 a.m. — Fellowesses' Brunch
- 2:00 p.m. — "Dads' Colonial Belles"
(Original play by Miriam Podgorski,
directed by Roy Hussang)
- Tea and Fashion Show by Ronette's
- *6:30 p.m. — Inaugural Reception honoring
President-Elect and Mrs. Begen
- *8:00 p.m. — Inaugural Dinner

Monday, May 16, 1977

- 7:30 a.m. — JEMPAC Breakfast
- 8:15 to 9:00 a.m. — Coffee and Donuts
- 9:00 a.m. to 12:00 noon — General Session
- 12 noon to 1:00 p.m. — Cocktail Hour
- 1:00 p.m. — President's Luncheon
- *5:30 p.m. — JEMPAC Wine and Cheese Reception
- *8:00 p.m. — Dinner-Dance honoring President
and Mrs. Madara
Entertainment and Dancing

Tuesday, May 17, 1977

- 8:00 a.m. — County Presidents' Breakfast
- 10:30 a.m. — Post-convention Board Meeting

Convention Committee

Chairman — Mrs. Douglas Hammett
Co-Chairman — Mrs. J. James Pegues

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RECENT CHANGES

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special report
Malpractice
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drug
bulletin

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need more red tape

Drug firms challenge
'MAC' rules

Drug
Substitution

The Common Denominator
of Health Progress
RESEARCH

Mailgram

THERE ARE A LOT OF PEOPLE GETTING BETWEEN YOU AND YOUR PATIENT.

Medicine today is in the spotlight, subjected to all kinds of scrutiny. Your control over patient therapy is being monitored, judged and occasionally abrogated, sometimes by unknown third parties.

The worry is that in the wake of this focus, the relationship between you and your patient will be weakened, without offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your non-generic prescriptions be filled with the precise products you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original NDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is a Federal regulation designed to cut the Government's drug bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only for the cost of the lowest-priced, purportedly-equivalent,

generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than \$1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

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New Jersey has the highest cancer death rate in the nation for many of the most frequently fatal types of cancer and yet it has qualified for relatively little of the federal funds for cancer research and control made available since the Conquest of Cancer Act was passed in 1971. This report examines the reasons for this and concludes that New Jersey lags because it has provided relatively little encouragement for cancer research in any of its institutions. Consequently there are few competent research teams in New Jersey to apply for federal funds.

Cancer and Cancer Research in New Jersey*

Lewis L. Coriell, M.D., Camden

Recent headlines quoted from an NIH report¹ that New Jersey citizens have the highest cancer rates in the United States for many of the most frequently fatal types of cancer, including cancer of the bladder, breast, large intestine, rectum, and lung. This has been known for a number of years, but has attracted relatively little publicity or official response in New Jersey. Statistical analysis as shown in Table 1 indicates that New Jersey has three and a half percent of the U.S. population, but four percent of new cancer cases which makes the incidence

tional Cancer Institute (NCI) more funds for cancer research and control. Funding of the effort at NCI has increased from \$181 million in 1970 to \$762 million in 1976, but New Jersey has qualified for relatively little of this (see Table 2).

Citizen concern for this situation led to founding of the non-profit Cancer Institute of New Jersey (CINJ) on September 20, 1974. Among its purposes are "improving existing levels of early detection, treatment, research and

Table 1
Comparison of Cancer Statistics in New Jersey and the United States

	U. S.	N. J.	N. J. as % of U. S.
Population ²	212,812,000	7,414,000	3.5
New cancer cases ³	655,000	26,000	4.0
Cancer deaths ³	355,000	14,000	3.9
Incidence per 100,000 population	308	351	114.0
Mortality per 100,000 population	167	189	113.2
Cost of hospital care for New Jersey Cancer Patients ⁴	\$75 million		
Estimated total costs including doctor bills, OPD therapy, lost wages, insurance, indirect costs ^{5,6}	\$750 million to 1.0 billion		

of cancer 14 percent higher in New Jersey than in the United States. The estimated hospital costs of cancer care to New Jersey residents were 75 million in 1972.

Nationally, cancer is the disease most feared by the American people and in response to these concerns Congress established the National Cancer Program in 1971 to provide the Na-

*A Report by the Research Committee of The Cancer Institute of New Jersey, March 1976. Membership: Lewis L. Coriell, Chairman, Institute for Medical Research; Charlotte Avers, Douglass College; Alan Conney, Hoffmann-LaRoche; Eric Hirschber, CMDNJ; Arnold Levine, Princeton University; Donald Norris, Rutgers Medical School; Robert J. Robinson, Rutgers Medical School; Arnold Rubin, CMDNJ; R. Walter Schlesinger, Rutgers Medical School; Robert W. Simpson, Waksman Institute; William A. Strohl, Rutgers Medical School; Thomas R. Walter, CMDNJ; Michael Lea, NJ Medical School; George P. Studzinski, NJ Medical School.

Table 2
Cancer Research Grants and Fellowships Awarded During FY 1975

State	Population ⁷	Awarded by ACS			Awarded by NCI		
		Total \$	Per Capita \$	N. J. as %	Total \$	Per Capita \$	N. J. as %
Connecticut	3,095,000	\$1,109,224	.36	900	\$ 10,827,000	3.50	336
Maryland	4,098,000	\$ 615,996	.15	375	\$ 75,211,000	18.35	1760
Massachusetts	5,828,000	\$1,636,282	.28	700	\$ 42,361,000	7.27	699
New Jersey	7,316,000	\$ 307,725	.04	100	\$ 7,598,000	1.04	100
New York	18,120,000	\$4,757,318	.26	650	\$107,251,000	5.92	569
Pennsylvania	11,827,000	\$1,358,661	.12	300	\$ 34,788,000	2.94	283
Virginia	4,967,000	\$ 484,146	.10	250	\$ 17,156,000	3.45	332

education in . . . cancer."

CINJ applied for a planning grant from NCI to develop a program for attacking New Jersey's cancer problem in a coordinated manner including the most modern methods of cancer research, patient care, and cancer control. The application was approved in December 1975 and funded in August 1976.

The Research Committee of CINJ at its first organizational meeting on January 30, 1976 sought to identify explanations for New Jersey's lack of participation in the national cancer research programs on the theory that any reasons identified would form the basis for corrective measures in our cancer control plan.

This report is the first attempt to identify the causes and to suggest solutions for New Jersey's failure to take advantage of federal programs to support cancer research and control. To do this New Jersey's performance will be compared to other states in its geographic region.

New Jersey is in the heart of the industrialized eastern seaboard. Although 46th in size among the states, it has the densest population per square mile—1,016 in 1975⁸, and is increasing at the rate of 1.3 percent per year (Table 3). It has the fourth highest per capita income among the states and is the most highly urbanized (Table 4). In spite of its density of wealth, population, and need for cancer research, New Jersey has not been able to attract much of the federal funds made available through the National Cancer Institute.

Historically, New Jersey has lacked the most advanced and complex medical care facilities.

Table 3
New Jersey Population
1975* 1980* 1985*

Total population	7,644,720	8,095,000	8,956,500
Population per sq. mile	1.016	1.076	1.143

*Estimated⁸

Table 4
Rank of New Jersey in Relation to Other States
1974-1975

State	Population Density ⁹	Income/Capita ¹⁰	
	Per Sq. Mile	Rank	Rank
Connecticut	624	4	2
Maryland	397	5	10
Massachusetts	727	3	12
New Jersey	953	1	4
New York	381	6	6
Pennsylvania	262	8	18
Virginia	117	15	23
United States	58		

Residents who required these services have had to seek them in institutions in New York City and Philadelphia. This served the more affluent citizens of New Jersey who could afford to travel to another state for medical care but retarded provision of high-quality care for the average citizen.

For many years New Jersey provided no centers for training physicians so students were forced to go to other states for medical education. These centers of excellence in education and training are usually the nuclei of centers of excellence of patient care. In recent years,

as the costs of medical education have increased, many states have refused to accept New Jersey applicants to medical school because a considerable portion of the expense is borne by the receiving state. The net result is that many New Jersey students cannot get into American medical schools; many are educated in other states and never come back to New Jersey, but practice in the area where they receive their undergraduate and residency training. There are a number of cumulative effects of these policies;

1. *A shortage of medical manpower:* A survey in 1975 showed that the national average ratio of medical doctors per 100,000 population is 159, whereas in New Jersey it is 126, and in South Jersey it is 91.5%. Dr. Stanley Bergen, President of the College of Medicine and Dentistry of New Jersey, has estimated that there is a continuing need for 100 new physicians a year in South Jersey to correct the deficit and to replace physicians who die or leave the area. As of January 1975 only a small percentage of all physicians practicing in New Jersey had received their medical education in New Jersey: 6.2 percent in Area I; 7.3 percent in Area II; 5.7 percent in Area III; and 3.8 percent in Area IV.**

2. *A shortage of full-time physicians in hospitals:* There are few university-affiliated hospitals in New Jersey where American medical school graduates prefer to take their internship and residency training. Therefore, most New Jersey hospitals do not attract American-trained interns and residents and must settle for graduates of foreign schools or do without residents (Table 5).

3. *A shortage of research:* With few full-time teachers, residents, and practitioners in most New Jersey hospitals, it is obvious that there is little time for research, research training, or research facilities devoted to cancer or to any other disease for which present knowledge is insufficient (Table 6). Note that in New Jersey medical schools there are 1.4 students enrolled for advanced degrees per 100,000 population whereas in neighboring states it varies from 5.9 to 15.3 with an average of 9.2/100,000 or 657 percent more than in New Jersey. Figures

are not available at this writing for students enrolled for advanced science degrees in universities. However, New Jersey has only one major university so its position relative to neighboring states is not likely to be changed when these data become available.

4. *A suboptimal quality of care:* The ultimate result of the first three points is suboptimal care for the citizens of New Jersey. Other cumulative effects could be listed but the ones stated are sufficient to indicate that there are chronic deficiencies in the quality and availability of patient care and health delivery in New Jersey. The high incidence of tuberculosis and infant mortality in New Jersey's urban centers, the above-average incidence of cancer deaths, the necessity of seeking care in Philadelphia or New York are unresolved concerns. The costs of hospitalization and treatment in Philadelphia are approximately double those in South Jersey. A comparison made in 1973 shows average costs of procedures in Philadelphia vs. South Jersey (Table 7).

In addition to the greater costs of medical care in Philadelphia for South Jersey residents, one must add the expense and inconvenience of travel for patients and visitors, parking, and personal safety. The difference in costs is not accounted for by the types of tertiary care provided in Philadelphia. Most types of tertiary care are now provided in South Jersey and care by tertiary care physicians is not necessarily more expensive than care by primary care physicians as shown by a survey in Ohio.¹⁴ In 1960 twenty-two percent of hospital beds in Philadelphia were occupied by South Jersey residents while in 1973 it was seven percent.

Cancer in New Jersey

New Jersey has some of the highest cancer death rates in the United States for the more frequently fatal cancers, including bladder,

**Areas adopted for health planning purposes by the Comprehensive Health Plan for New Jersey, and since adopted by the New Jersey Health Service Areas under PL 93-641. Area I—Bergen, Hudson, Passaic, Sussex; Area II—Essex, Morris, Union, Warren; Area III—Hunterdon, Mercer, Middlesex, Monmouth, Ocean, Somerset; Area IV—Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Salem.

Table 5
Intern and Resident House Staff in New Jersey Hospitals 1974-1975¹¹

State	Total No. House Staff	Graduates of Foreign Schools	Percentage of House Staff Graduates of Foreign Schools
Connecticut	1,171	494	42
Maryland	1,956	754	38
Massachusetts	2,742	689	25
New Jersey	1,743	1,289	74
New York	10,004	5,485	54
Pennsylvania	3,869	1,255	32
Virginia	1,133	191	17

Table 6
Graduate Training in Basic Science Departments of Medical Schools¹²

State	No. Students Enrolled for Advanced Training			Total Students	
	Masters	Ph.D.	Post-Doctoral	No.	No./100,000 Population
Connecticut	179	200	94	473	15.3
Maryland	105	202	78	385	9.4
Massachusetts	25	241	191	457	8.0
New Jersey	11	73	19	103	1.4
New York	245	1,117	157	1,519	8.4
Pennsylvania	183	578	196	957	8.0
Virginia	58	204	25	287	5.9

Does not include graduate training in universities

Table 7
Average Costs in Dollars¹³

	Phila.	Southern New Jersey	Higher % of Cost in Phila.
Average per diem cost	\$157	\$ 85	83%
Average cardiac catheterization	\$700	\$226	209%
Average dialysis	\$370	\$138	168%
Average operating room charge hour	\$245	\$137	78%

breast, large intestine, rectum, and lung as shown by a national survey.¹

"Of the 21 counties in New Jersey, 18 have bladder cancer rates in the highest decile of male rates for *all* U.S. counties. Indeed, the rate for Salem County New Jersey (16.1 per 100,000 population) ranks highest among all American counties with a white population of at least 10,000.

"Of the 21 counties in New Jersey, the rates for colon cancer are the highest decile nationally for 15 counties in males, and 16 counties in females. For rectal cancer, the corresponding numbers are 18 and 15."

Medical Education in New Jersey

The above deficiencies of health care, among others, led to the establishment of a private medical school at Seton Hall in 1954 which was taken over by the State in 1965 and moved to Newark where it became the New Jersey

College of Medicine and Dentistry. In 1962 the state opened Rutgers Medical School.

In 1970 both medical schools and the dental school were put under one Board of Trustees. The College of Medicine and Dentistry of New Jersey (CMDNJ) now has several divisions:

New Jersey Medical School (Newark); Rutgers Medical School (Piscataway); New Jersey Dental School (Jersey City); Graduate School for Biomedical Sciences (Newark); and another medical education program being developed in South Jersey. The latter school will be a branch of the parent CMDNJ and will provide the third and fourth years of clinical training at existing Cooper Medical Center and other community hospitals. A veteran's hospital to serve Dela-

ware Valley has been authorized at the site to complete a regional medical complex of teaching hospitals in South Jersey.

The primary function of a medical school is to train future physicians but the multiplicity of specialized skills required to deliver modern medical care means that a medical school must have a nucleus of full-time physicians who devote time to training medical students. The busy practitioner does not have the time to do that. A medical school must provide (1) formal education, (2) experience in patient care, (3) research, and (4) community outreach programs. These, in turn, require sufficient hospital beds, classrooms, and laboratories.

Time for research is essential to attract a scholarly faculty who will study unsolved medical problems and will keep abreast of recent advances at other institutions around the world. A medical school should have access to all advanced medical knowledge and be able to interpret it to the students and provide it to patients in its region.

Outreach programs help to improve standards of community health care delivery through regional planning, postgraduate education of physicians, cooperative programs with community hospitals for training interns and residents, coordination of health and welfare services, referral channels for regional hospitals, and research to develop better methods for community delivery of health care.

All these elements, which are necessary if a medical school is to be a center of excellence for health care, have been deficient in New Jersey in the past; even today the medical school budgets provide inadequate clinical facilities at Rutgers and inadequate support for research at all units. The latter is the most important single item for attracting and holding a scholarly faculty. The key to excellence in a medical school is the quality of the faculty. Modern medicine is advancing so rapidly that obsolescence occurs in a few years among practitioners unless they attend refresher sessions; even in the medical schools it occurs unless a portion of the faculty can devote some

time to research and scholarly pursuits that keep them abreast of new methods of diagnosis, treatment, prevention, and education in their own specialty.

Research and Disease Control

Research is another name for acquisition of knowledge and scientific research implies a systematic accumulation of verifiable facts in an effort to solve problems for which no known explanation exists. In biological science modern research dates from the time of Louis Pasteur who (over 100 years ago) demonstrated the techniques and benefits of the controlled experiment to learn about the cause, diagnosis, and prevention of infectious diseases. Application of these techniques has eliminated most infectious diseases in the western world, one of the outstanding scientific achievements of medicine in the 20th century. This did not happen suddenly; more than 60 years of basic research after Pasteur's work were required before enough knowledge was accumulated to eliminate the epidemics of contagious and infectious diseases which formerly kept the death rate about equal to the birth rate. Infectious diseases were controlled through vaccination, sanitation, mosquito control, antibiotics, and chemotherapy. In all cases it involved study of the normal life cycle of the etiological agent.

Control of cancer, which is infinitely more difficult than control of infectious diseases, also will require a prolonged period of basic research to accumulate the knowledge-base necessary. The problem in cancer is loss or malfunction of normal control mechanisms that regulate interacting life processes between cells. Among mechanisms already implicated are: genetic susceptibility, viruses, radiation, chemical mutagens, immune surveillance, hormonal and neuronal messages, and the feedback messages that serve to integrate the actions of each cell with the whole body. Molecular biology, the study of these chemical changes and controls within and between cells, is the thrust of modern research which eventually will lead to better control of the major causes of morbidity and mortality—arteriosclerosis, hypertension, heart disease, stroke,

cancer, genetic diseases, diabetes, arthritis, and mental diseases.

Is Research Cost Effective?

Our western culture was built on research which continues to develop better ways of providing food, clothing, housing, transportation, labor-saving machinery, energy sources, manufactured items of all kinds and even improved plants and animals. It has made us the industrial leader of the world with the highest standard of living. Industries in the United States that maintain a vigorous research effort are perennial leaders in profits. That medical research is also highly cost-effective was dramatically demonstrated in poliomyelitis. In the middle of this century treatment of poliomyelitis was costing the country nearly 100 million dollars a year; we were building hospitals for the rehabilitation of people with paralyzed muscles. The March of Dimes invested a small percentage of this, five million dollars a year, in basic research; as a result poliomyelitis is now prevented by a few cents worth of vaccine. Measles, Rh disease, and rubella are now controlled by similar procedures. The rubella epidemic of 1964 left 30,000 victims with deafness, blindness, cardiac, and behavioral defects that have already cost the country two billion dollars. Since penicillin and other antibiotics permit home and office treatment of 99 percent of patients with infectious diseases due to bacteria, contagious disease hospitals which were once maintained by every sizeable city and/or state, are *all* closed for want of patients.

Can these triumphs of industrial and medical research be repeated for cancer? The answer is of course—if we permit research to continue. How long will it take? The answer—until we accumulate sufficient knowledge to understand how to interrupt or reverse the cancer process.

Nature of Scientific Research

What then is the nature of scientific research and how can it be fostered? It seeks to explain biological phenomena by creating a hypothesis to explain observed facts and then tests the hypothesis by a controlled experiment rather

than by debate. If the results are consistent and repeatable, a new truth has been established which can be incorporated into a new hypothesis. In this manner research progresses by small steps which may not lead straight to the original goal. It is moved by the curiosity and enthusiasm of those seeking explanations for unresolved problems. Small advances are contributed by many investigators while major discoveries require prolonged effort and accumulation of many bits of data. New ideas and new hypotheses rarely occur to anyone not actively working on a problem, since interpretation of the results of one experiment raise questions to be answered by the next experiment. Hence the research worker needs freedom to pursue the results wherever they may lead.

Kornberg has likened the flow of science to a river which flows always toward the sea.¹⁵ "Like rivers, the pace and dimensions of scientific movement vary enormously. But shallow or deep, broad or narrow, sluggish or swift, the movement is inexorably forward. In contrast, the *support* of science throughout history rises and falls like the tides."

It has been a century since Pasteur established the pattern that scientific medicine has followed. The benefits in better health are too numerous to list; they have reached their greatest potential in the last quarter century with the advent of molecular biology, which is developing chemical explanations for health and disease at the cellular level. Continued research is the only way that partially treated diseases can be moved into the high technology group where they can be prevented or cured. To stop research and put all effort into better delivery of what is already known would accomplish relatively little. How much would we gain in control or prevention of cardiovascular disease, hypertension, stroke, heart attacks, cancer, mental sickness, arthritis, kidney disease, genetic disease, sickle cell disease, multiple sclerosis, or diabetes? For all these diseases we have only palliative, expensive treatment of end results but no prevention or cure such as is available for poliomyelitis or strep throat. Of course we should try to make available all that is known but keep in mind that it is the portion

of funds spent on research that will lead to prevention or cure.

That advancement of knowledge through scientific research is the most efficient process yet devised by man for solving problems has been demonstrated amply by its applications in western culture. If there are new problems raised by some of the solutions and if unsolved problems and questions remain it seems imperative that science continue using the methods which have proved successful in the past. In short, the scientific community has a clear responsibility to continue. The cost benefit ratio is favorable and there is no valid alternative. Basic research has a long-time scale; the source of innovative ideas is the individual investigator, and the cumulative efforts of many disciplines and facilities are needed for modern research.

Requirements

What then are the basic requirements for a vigorous research program against cancer or any other unsolved medical problem? The requirements for productive biomedical research are well established by experience, widely recognized in the scientific community, and are, in fact, the basis for evaluating grant proposals by all granting agencies that support cancer research. By far the most important is to identify a competent investigator to lead and conduct the research project. All other requirements are secondary and supportive. They include adequate physical facilities and equipment, stable support, freedom of inquiry, an intellectual environment, and competent administration.

Competent investigator: Competence is judged by one's record of productivity, originality, ability to conceive new ideas and to get them funded, ability to carry through the research, publish the results, and defend them before peers who then are able to replicate the new discoveries. All of these qualities are found wherever innovative research is being produced. Modern cancer research involves techniques from many disciplines such as patient care, chemistry, pharmacology, physics, microbiology, and cell culture. It is, therefore, most

efficiently conducted if several investigators combine their varied skills to create a critical mass of technical disciplines. Excellence in research is dependent on the excellence and competence of the principal investigator who directs the research program.

Facilities and equipment: Each scientific discipline has special requirements for laboratory and animal space, incubators, microscopes, supplies and technical instruments, refrigerators, and so on. In many cases expensive equipment and space can be shared by several investigators; this is another economy in having a critical mass of investigators working in one institution.

Stable support: The most critical element of support is stable funding of the salary of the principal investigator so that he can build a research team and apply for grant support to assemble all the equipment, supplies, personnel, animals and/or patient contacts for a successful research effort. Successful investigators bring in much additional supplementary funding so underwriting their salary is an excellent investment. In addition, there are secondary benefits that follow a successful research program. Stability of support for the principal investigator is stressed because exceptionally competent investigators are in demand and have their choice of many job opportunities; biomedical research requires prolonged effort. Pasteur's words to his students 100 years ago are still appropriate: "Allow me to give you an advice that I have always tried to follow and which consists of staying the longest possible time in one subject. Everywhere, I believe, the secret of success lies in prolonged efforts. With perseverance in research one finishes by acquiring what I would like to call the instinct for truth."

Freedom of inquiry: Having gathered the facilities, supplies, support, and an innovative investigator for a research project, it is of utmost importance to let the investigator conduct the research in his own way. We are seeking new explanations for cancer never before articulated and this is the specialty of the investigator chosen to lead the project.

Intellectual environment for inquiry: Where a group of investigators in an institution are conducting research on related problems, an esprit de corps and appreciation of scholarship develops. This feeling is infectious and promotes exchange of ideas, criticism, stimulation, cooperation, and collaboration, the sum of which is greater than its parts.

Competent administration: The role of management in research is to bring together all the above elements and facilitate their interaction in the most productive manner. It involves measures to foster discussion and intercommunication, optimal use and maintenance of facilities, cooperative planning, efficient house-keeping, procurement of supplies and equipment, fiscal management, allocation of space, appointment of investigators, and coordination with other departments, institutions or agencies. General fiscal accountability is a function of research administration. Competent research administrators have an appreciation of the requirements for innovative research and avoid trying to direct the *conduct* of research, which is the function of the principal investigators.

Cancer Research in New Jersey

By applying these guidelines to New Jersey it is not difficult to see why our State has received so little in cancer research funds from the National Cancer Institute and other sources. New Jersey has few competent cancer investigators with time, facilities, and equipment for research. This state is not training adequate numbers of new investigators nor providing stable support to attract those trained elsewhere.

To correct this situation and thereby receive its fair share of cancer research funds from federal and other sources, New Jersey must provide stable funds to attract cancer investigators and to provide nuclei of facilities and services where productive research can be conducted. The health benefits for cancer victims of such a move are obvious and the ripple effects in other health-related fields are also predictable. Would it be cost-effective to spend New Jersey funds to encourage development of centers of excellence for cancer research? By referring to Table 2 one can see that New

Jersey received \$7,598,000 from the NCI in 1975 whereas the six neighboring states received an average of 4.93 times as much on a per capita basis. If New Jersey had attracted its proportionate share of the NCI cancer grants and contracts in 1975, it would have received \$37,458,000. The state has incurred a loss of 30 million dollars in one year.

A logical conclusion, after review of all these facts, is that New Jersey can ill afford to continue its present policies in this matter. Corrective measures should be adopted promptly and funded adequately to make up for lost ground with the object of making New Jersey competitive in cancer research within the next five years. Where can New Jersey get the necessary funds?

Suggested Plans for Funding Cancer Research

1. Cigarette smoking is one of the major causes of lung cancer. A small tax on cigarettes would serve the dual purpose of discouraging cigarette smoking and helping to bring New Jersey's cancer research capability up to the regional average. A special one cent tax per package would provide a fund of approximately eight million dollars a year which should be earmarked for cancer research in New Jersey. The present cigarette taxes in New Jersey and neighboring states are shown on Table 8. Half the fund should be allocated in designated portions to the one cancer research institute now functioning in New Jersey and to each of the three branches of the medical-dental school of New Jersey in North, Central, and South Jersey and to the state university. These institutions

Table 8
Cigarette Taxes Per Pack, 1976¹⁶

Connecticut	21¢
Maryland	10¢
Massachusetts	21¢
New Jersey	19¢*
New York	15¢ (plus 8¢ more N.Y.C.)
Pennsylvania	18¢
Virginia	2.5¢

*New Jersey's cigarette tax of 19¢ per package generated an income of \$167,000,658 in 1975.

have the personnel, experience, dedication, and commitment to use the funds in an optimal manner. These awards should be specified for cancer research—with special emphasis on providing stable support for competent investigators and any supportive facilities and services required, at the discretion of the scientific management of those institutions. Strict yearly accounting should be required and carry-over of unspent funds should be permitted to encourage management to make long range plans for staffing, facilities, and program development. This would leave half the money for funding approved grant applications and cancer control programs from these and other institutions within the state and to encourage awards from NCI and other federal sources.

Committed taxes are unconstitutional in New Jersey, but the feasibility of an appropriation of seed money for cancer research and a cigarette tax of identical size should be explored. It would be a sound investment of public funds and politically attractive, given a public fully aware of New Jersey's cancer problems and the shortage of staff and facilities for cancer research.

In 1970, Kentucky established such a program funded by a five cent specific cigarette tax on every cigarette package sold in the state. A Kentucky Tobacco Research Board was created by the legislature to supervise expenditure of the funds on the university campuses at Lexington and Louisville and elsewhere.¹⁷

Such a massive program is not now necessary in New Jersey. A modest one cent per package will be adequate at this time. If care is taken in setting up the governing board to distribute the funds it can be assured that awards are made on scientific merit, which will guarantee that New Jersey will help solve its cancer problems and lay the groundwork for solution of many other unsolved medical problems of concern to residents of the state and the nation.

2. Other sources of funding are possible, although the cigarette tax and/or liquor tax have much appeal. Epidemiologic studies clearly implicate alcohol and tobacco in the causation of cancer of the esophagus.

3. Another potential source of funding for cancer research is voluntary contributions from industry in New Jersey. At least two large segments of industry could profit directly and indirectly from better cancer research and control in New Jersey, the chemical-pharmaceutical industry and the insurance industry. Contributions to non-profit cancer research would be tax exempt.

Funds from industry could supplement and match the NCI planning grant award to CINJ in its developmental stages and help to bridge the gap until some stable state funding is established and thereafter to provide seed money for new approaches not covered by the stable funding sources.

All the foregoing proposed renaissance for cancer research in New Jersey is not an impossible pie-in-the-sky pipedream, but rather a practical, achievable goal—which would have broad public support and predictable benefits in better health care and greatly increased federal funding to help attack New Jersey's cancer problems.

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Institute for Medical Research, Copewood Street, Camden

INFORMATION FOR READERS AND CONTRIBUTORS

The Journal, the official organ of The Medical Society of New Jersey, is published monthly under the direction of the Committee on Publication. *The Journal* is released the first week of the month, and a copy is sent to each member of the Society.

Change of Address: Notice of change of address should be sent promptly to The Medical Society of New Jersey, P.O. Box 904, Trenton, New Jersey 08605.

Communications: Members are invited to submit to *The Journal* any suggestions for the welfare of the Society, as well as comments or criticisms of material in *The Journal*. All such communications should be directed to the Editorial Office of *The Journal*. The Publication Committee reserves the right to publish, reject, edit, or abbreviate all communications submitted.

Contributions: Manuscripts (original and one copy) submitted to *The Journal* must be typewritten, *double-spaced* on letter size (about 8½ x 11 inch) paper, and forwarded to the

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1. Russek HI: AM J M Sc 239:478, 1960



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NEW JERSEY DOCTORS' NOTEBOOK

Trustees' Minutes

February 23, 1977

A regular meeting of the Board of Trustees was held on Wednesday, February 23, 1977, at the Executive Offices, Trenton. Detailed minutes are on file with the secretary of your county medical society. A summary of significant actions follows:

Medical-Vision Advisory Panel . . . Received as informative a report from the Executive Committee which listed the following names of nominees submitted to the Governor for membership on the Medical-Vision Advisory Panel — one appointment from each specialty will be made.

Cardiology	Louis F. Albright, M.D. Michael D. Yablonski, M.D.
Geriatrics	James Q. Atkinson, M.D. David Eckstein, M.D.
Psychiatry	Howard J. Weinberg, M.D. Eugene V. Resnick, M.D.
Neurology	Richard J. Kossmann, M.D. J. James Pegues, M.D.
Physical Medicine	Irving M. Levitas, M.D. Elmer J. Elias, M.D.
Ophthalmology	J. Robert Cox, M.D. Roger C. Laauwe, M.D.
General Practice	Harry W. Fullerton, Jr., M.D. Ralph J. Fioretti, M.D.

Reinsurance Application Approved . . . Noted that Lloyds of London has approved the Medical Inter-Insurance Exchange of New Jersey application for reinsurance.

AMA Delegates and Alternate Delegates . . . Agreed that the President should call a special meeting of the AMA Delegates and Alternate Delegates to consider and resolve the matter of MSNJ having five Delegates and Alternates elected last June though entitled to only four.

Guidelines for Care of Comatose Patients . . . Reviewed and approved the final draft of the "Guidelines for Health Care Facilities to Implement Procedures Concerning the Comatose and Non-Cognitive Patient."

CAT Scanners . . . Reaffirmed its action of December 16, 1976, by approving the following recommendation from the Council on Medical Services:

That the Medical Society of New Jersey urge the Commissioner of Health to keep the Proposed Standards for CAT Scanners as flexible as possible.

Committee on Medicaid . . . Considered the following proposals from the Committee on Medicaid and took the actions indicated:

(1) That MSNJ subsidize the printing (in pamphlet form) and mailing of a Medicaid "White Paper," the final draft of which is being prepared by the Committee.

. . . Tabled action on proposal #1 pending receipt of the "White Paper."

(2) That MSNJ subsidize physician-legislator brunches,

(3) That MSNJ subsidize the professional services of a public relations/lobbying agency to assist in responding to immediate events that affect the practice of medicine under Medicaid.

. . . Referred proposals #2 and #3 back to the Committee on Medicaid with the request that the proposals be more specific.

Resolutions #4 (Assignment of Benefits) and #24 (Blue Shield Claim Form) . . . Reaffirmed its action (*JMSNJ* 74:168, February 1976) to receive the response from Blue Shield concerning the above-named 1976 resolutions.

Note: The above action was taken following receipt of a communication from the Passaic County Medical Society, dated January 28, 1977, which stated that Passaic County was not satisfied with the response from Blue Shield and inquired whether MSNJ would accept the Blue Shield reply or take further action in behalf of adoption of the two resolutions.

Professional Liability Assessment . . . Received as informative a communication from the New Jersey Psychiatric Association which stated that that society is not opposed to the professional liability assessment since it has been made mandatory.

Resignation of I. Edward Ornaf, M.D. . . . Accepted the resignation (for reasons of health) of I. Edward Ornaf, M.D., from membership on the Board of Trustees and commended him for his many years of service to the Society.

. . . Voted to appoint S. Thomas Carter, Jr., M.D., to succeed Dr. Ornaf until the election at the Annual Meeting in May.

. . . Empowered the President to appoint a successor to Dr. Ornaf on the Committee on Finance and Budget.

Urban Health . . . Voted to table (pending further information) a request from the Department of Health and Welfare of the City of Newark for a letter of endorsement of an application designating sections of Newark as critical areas of health manpower shortage.

AMSA . . . Authorized a contribution of \$150 each to the two New Jersey medical schools to help defray the cost of medical students attending the AMSA convention in Chicago, March 31 to April 3.

Joseph P. Donnelly, M.D. . . . Commended Joseph P. Donnelly, M.D., recently resigned as AMA Delegate, for his many years of service on behalf of MSNJ and directed that he continue to receive copies of Board of Trustees' minutes and be invited to all official affairs of the Society.

Guidelines for Health Care Facilities in the Care of Comatose Patients

Declaration by State Agencies of Endorsement of Guidelines for Implementation of Quinlan Decision

The following statement is endorsed by Edwin H. Albano, M.D., President of the Board of Medical Examiners, and Joanne E. Finley, M.D., State Commissioner of Health, and, to the extent that it is his determination that the "Guidelines" meet the legal requirements of the *Quinlan* decision, by Attorney General William F. Hyland.

The New Jersey Supreme Court decision of March 31, 1976, in the matter of Karen Quinlan has placed the responsibility for making the most serious and awesome health care decisions in the hands of those directly associated with a patient "who remains with the capacity to maintain the vegetative parts of neurological function but . . . no longer has any cognitive function." Those assigned both rights and responsibilities are the family, the attending physicians,

and those responsible for the administration of the health care institution. The diffusion of responsibility is a concept in health care with moral and scientific roots. The Court wished to give legal sanction to this concept and has outlined, for such cases, a decision-making procedure which must be observed. In so doing, the Court has protected the rights of patients, their families and other responsible parties.

Specifically, the Court concluded that the guardian and family of an incompetent, incurably ill patient may request the withdrawal of the "life-support system." However, prior to compliance with this request, the responsible attending physicians must conclude that there is no reasonable possibility of the patient ever emerging from the comatose condition to a cognitive, sapient state. Should the physicians make this determination, they must then consult with "the hospital 'Ethics Committee' or like body." If that body concurs with the determination, then life-support systems may be withdrawn. This action can then be taken without any civil or criminal liability therefor on the part of any

of the participants. Significantly, the family always retains the right to seek additional and alternative medical consultation, including a different attending physician, if they do not agree with those who previously served them.

It is evident that the Court sought to resolve a medical and social dilemma by enunciating a standard which protects physicians in their reasoned exercise of professional judgment and families in their exercise of moral determinations. By diffusing the responsibility for a decision to withdraw life-support systems in the circumstances as defined, the Court sought to give legal sanction to practices it perceived were deeply rooted in medical and health care tradition. In addition, the Court has provided for a process whereby moral and professional medical judgments can be joined.

After the New Jersey Supreme Court rendered its decision the Attorney General conferred with, among others, the President of the Board of Medical Examiners and the Commissioner of Health. The Board and the Health Department have regulatory responsibility, respectively, for physician practices and for health care facilities. The Attorney General believed there was a need to derive suitably clear guidelines for health care professionals and institutions in order that they follow the directions of the Court and at the same time safeguard the rights of individuals.

Subsequently, in conjunction with the Attorney General's Office and the Board of Medical Examiners, the Commissioner of Health agreed to convene a small discussion group to develop such guidelines. In addition to the Commissioner of Health, the President of the Board of Medical Examiners, and two representatives of the Attorney General, the group was composed of persons representing: the State and National levels of the Family Service Association of America; The Medical Society of New Jersey; the New Jersey Association of Osteopathic Physicians and Surgeons; and a hospital trustee and a hospital administrator selected by the New Jersey Hospital Association.

During the course of several meetings the group considered the social, legal, medical and administrative aspects of the matter in the context of the Court-assigned responsibilities for such health care judgments. The group has arrived at a set of guidelines which will serve as a code of procedure for those parties who, when confronted with situations similar to the Karen Quinlan case, must be involved in the decision-making process indicated by the Court.

The members of the group are to be commended not only for their professional competence and dedication but also for their sensitivity to the needs, rights and interests of patients and families. In recognition of the group's efforts, the organizations representing physicians and hospital facilities in New Jersey are jointly issuing the guidelines.

The guidelines were also reviewed by the New Jersey State Nurses Association and the Northern New Jersey Chapter of the American Association of Critical-Care Nurses, both of which had offered to provide such input because of the nature and extent of the nurses' responsibilities as part of the health care team.

The careful and deliberate procedure to develop the guidelines, which has involved the participation of those parties deemed essential by the Court, and the resultant guidance to those entrusted to provide health care services, has fully satisfied the concerns of the State agencies that the requirements of the law be met. This statement, therefore, constitutes an endorsement, by those indicated, of the guidelines which are being issued jointly by The Medical Society of New Jersey, the New Jersey Association of Osteopathic Physicians and Surgeons, and the New Jersey Hospital Association.

The leadership posture taken by these organizations in advancing the guidelines to their respective memberships is a positive demonstration of professional cooperation and concern. As the guidelines are followed by the physicians and health care facilities of New Jersey, we believe that the mandates of the Court will be satisfied.

Guidelines for Health Care Facilities to Implement Procedures Concerning the Care of Comatose Non-Cognitive Patients

In order to assist and guide the medical profession and the governing authorities of health care facilities* in the implementation of the procedures required by the New Jersey Supreme Court for cases similar to that of Karen Ann Quinlan, the formation and operation of the requisite Prognosis Committee is described herein. The term, Prognosis Committee, recognizes the Court's view that "the focal point of decision should be the prognosis as to the reasonable possibility of return to cognitive and sapient life."

The basic decision-making procedure, as paraphrased from the Court's conclusions, would be as follows:

Upon the concurrence of the family, and in cases where required by law, the guardian** of the patient, should the responsible attending physicians conclude that there is no reasonable possibility of the patient's ever emerging from a comatose condition to a cognitive, sapient state and that the life-support apparatus being administered to the patient should be discontinued, they (the responsible physicians) shall consult with the Prognosis Committee (or like body) serving the institution in which the patient is confined. If that consultative body agrees that there is no reasonable possibility of the patient's ever emerging from a comatose condition to a cognitive, sapient state, the life-support system may be withdrawn and said action shall be without any civil or criminal liability therefor on the part of any participant, whether guardian, physician, hospital, or others.

*In this context, "health care facility" means an institution or facility as defined in the Health Care Facilities Planning Act (N.J.S.A. 26:2H-2a)

**The term guardian as here used refers to the "guardian of the person of the incompetent." This individual may be designated by a court to make decisions for the incompetent concerning the incompetent's physical state and bodily integrity, such as the acceptance or refusal of various types of treatment. Such guardians are bound by traditional fiduciary duties, and must act in the perceived best interests of the incompetent.

This form of guardianship is contrasted with the "guardian of the property of the incompetent" who may be designated by a court to make decisions for the incompetent concerning dispositions of the incompetent's realty and personality. Such guardians have no control over the disposition of the incompetent's body; i.e., person, and are not involved in any decisions concerning the incompetent's medical treatment.

A Prognosis Committee, which will facilitate the decision-making process outlined by the Court, should be established or arranged for by those health care facilities which receive inpatients who are or may become comatose and non-cognitive. The Committee should function in the manner indicated by the following guidelines.

(a) *Responsibility for Forming the Prognosis Committee*

The Board of Trustees, or responsible governing authority of the facility, shall have the responsibility to select those physicians who will form the Prognosis Committee. The physicians shall be designated to serve for a specific term and one of these physicians shall be selected by the governing authority to chair the Prognosis Committee.

(b) *Composition of the Prognosis Committee*

1. A standard complement of medical disciplines shall be represented on the Prognosis Committee. These disciplines will be: General Surgery; Medicine; Neurosurgery or Neurology; Anesthesiology; and Pediatrics (if so indicated by the type of patient). At least two (2) additional physicians from any appropriate disciplines shall be selected from outside the staff of the facility to serve on the Prognosis Committee.

2. It is highly desirable that the physicians serving on the Prognosis Committee be board certified in their respective specialties.

3. At the time that the Prognosis Committee is required to consider a case, the family, guardian or attending physician can request that the Prognosis Committee consult with a specific physician named by any of them. The medical specialty of such physician should be predicated upon the particular characteristics of the patient's case. The Prognosis Committee shall accede to this request. The family also may designate a physician, other than the attending physician, to be present throughout the Committee's proceedings.

4. Under no circumstances should any of the

physicians serving on the Prognosis Committee have been the attending or treating physician on the case under consideration.

Note: In order to proceed with the establishment of the requisite Prognosis Committees some facilities, because of staff limitations, may need assistance in this effort or may desire to act cooperatively with neighboring institutions. For example, the regionalizing (or sharing) of a Prognosis Committee to serve several health care facilities is recommended as a practical approach. It is suggested, therefore, that health care facilities seek assistance in developing and coordinating such arrangements from the New Jersey Hospital Association as well as the professional medical organizations (The Medical Society of New Jersey, and the New Jersey Association of Osteopathic Physicians and Surgeons).

(c) Activation of the Prognosis Committee

1. The patient's family or guardian, or the attending physician acting on behalf of the family may, in writing, request the health care facility's chief executive officer (administrator) to activate the Prognosis Committee to begin its work on a case. In the event that this request is made by the guardian of the patient, such individual shall present legal documentation so designating his status to the chief executive officer of the health care facility. The administrator has the responsibility to ensure and to notify the Chairman of the Board of Trustees, or other responsible governing authority, as to the status of the Committee's composition.

2. The administrator shall advise the designated Chairman of the Prognosis Committee to have the group proceed promptly and with due diligence to come to a conclusion either supporting (concurring) or rejecting the prognosis of the attending physician.

3. The administrator also shall make readily available to the family the counseling and support services of the health care facility, or of the surrounding community.

(d) Prognosis Committee Functions and Reporting Requirements

1. The Committee shall review all relevant patient records, with the family's consent, and shall seek additional medical information concerning the patient from those nursing personnel and other professionals it deems appropriate to the case under consideration. The Committee also shall determine which member or members

will conduct a complete examination of the patient.

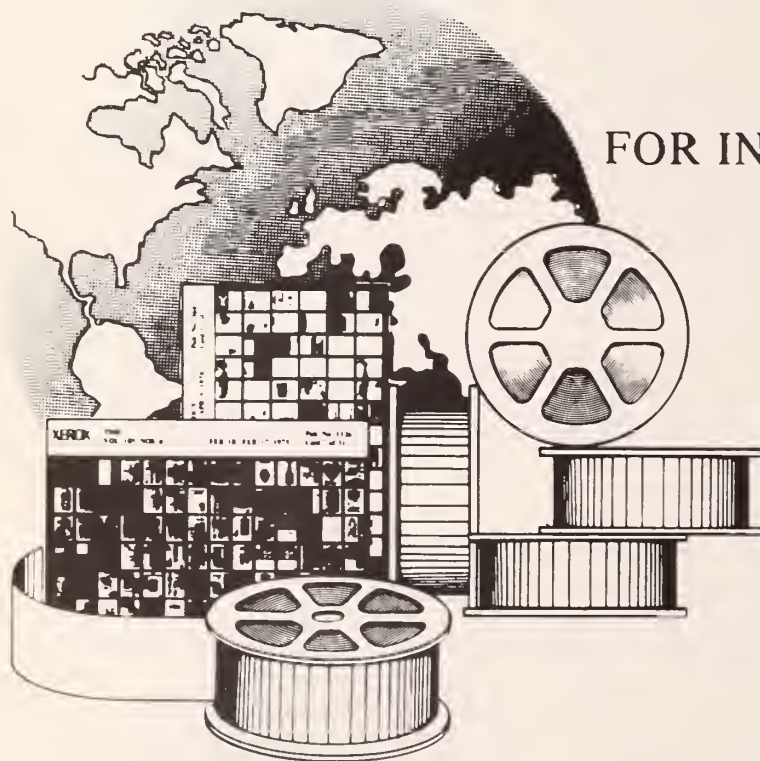
2. During the course of its deliberations, the Committee should arrive at a clear consensus with respect to the prognosis of the patient although the Supreme Court's decision does not expressly require unanimity. It is recognized that professional standards dictate caution in the determination of the prognosis.

3. The Chairman of the Prognosis Committee shall summarize and report the Committee's conclusion, in writing, to the chairman of the hospital's Board of Trustees, or other responsible governing authority, the attending physician, the administrator of the hospital, the patient's family, and when appropriate, the patient's guardian. The report shall consist of the Committee's findings concerning the prognosis of the patient, supplemented by a summary of the information considered including professional consultations, if any, and the reasons supporting their conclusion. The report shall identify each of the participating members of the Committee and their respective specialties and which member or members performed the complete examination of the patient. Finally, the Committee shall make a specific written finding in the report as to whether there is no reasonable possibility of the patient's ever emerging from a comatose condition to a cognitive, sapient state. The report shall be retained and preserved by the health care facility as part of the medical record of the patient.

(e) The Continuing Responsibility of the Attending Physician

It should be recognized from the foregoing that the function and responsibility of the Prognosis Committee is limited to the application of specialized medical knowledge to a particular case in order to arrive at a determination of concurrence or non-concurrence with the prognosis of the attending physician. Once that determination has been made and reported, the Committee has thereby discharged its responsibility. The attending physician, guided by the Committee's decision and with the concurrence of the family, may then proceed with the appropriate course of action and, if indicated, shall personally withdraw life-support systems.

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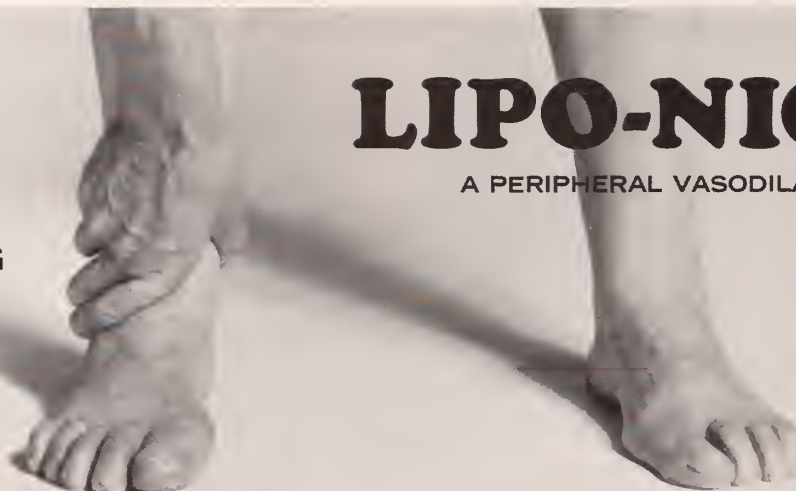
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Report of the Nominating Committee

Offices To Be Filled by Election — 1977 Annual Meeting

James A. Rogers, M.D., Chairman

Office	Term	Nominee and County
President-Elect	1 year	Charles S. Krueger, M.D., Burlington
1st Vice-President	1 year	Alfred A. Alessi, M.D., Bergen
2nd Vice-President	1 year	George L. Benz, M.D., Essex
Secretary	3 years	Arthur Bernstein, M.D., Essex
Treasurer	3 years	Rudolph C. Gering, M.D., Mercer
Trustees		
1st District	3 years	George L. Benz, M.D., Essex
2nd District	3 years	James S. Todd, M.D., Bergen
4th District	1 year	S. Thomas Carter Jr., M.D., Camden
5th District	3 years	Sherman Garrison, M.D., Cumberland
Judicial Councilors:		
2nd District	3 years	John L. Olpp, M.D., Bergen
5th District	3 years	John A. Surmonte, M.D., Salem
AMA Delegates:		
	2 years	William J. D'Elia, M.D., Monmouth
	2 years	James S. Todd, M.D., Bergen
AMA Alternate Delegates:		
	2 years	Alfred A. Alessi, M.D., Bergen
	2 years	Charles L. Cunniff, M.D., Hudson
	2 years	Frederick W. Durham, M.D., Camden
	2 years	Howard D. Slobodien, M.D., Middlesex
Delegates and Alternate Delegates to Other States:		
New York:		
Delegate	1 year	Albert F. Moriconi, M.D., Mercer
Alternate	1 year	F. Sterling Brown, M.D., Atlantic
Connecticut:		
Delegate	1 year	Edward G. Bourns, M.D., Union
Alternate	1 year	Gastone A. Milano, M.D., Atlantic
Administrative Councils:		
Legislation:		
1st District	3 years	John R. Tobey, M.D., Essex
4th District	3 years	Meyer L. Abrams, M.D., Burlington
Medical Services:		
1st District	3 years	Richard H. Sharrett, M.D., Union
4th District	3 years	Charles O. Tyler, M.D., Camden
Mental Health:		
1st District	3 years	Alvin Friedland, M.D., Essex
2nd District	3 years	Ralph J. Fioretti, M.D., Bergen
Public Health:		
1st District	3 years	Edward M. Coe, M.D., Union
4th District	3 years	Watson E. Neiman, M.D., Burlington
Public Relations:		
1st District	3 years	Frank Y. Watson, M.D., Essex
4th District	3 years	Jesse Schulman, M.D., Ocean
Standing Committees:		
Annual Meeting	3 years	James H. Spillane, M.D., Warren
Finance and Budget	3 years	Charles S. Krueger, M.D., Burlington
Medical Defense and Insurance	3 years	Frank J. Malta, M.D., Ocean
Medical Education	3 years	Arthur Bernstein, M.D., Essex
Publication	3 years	Julio del Castillo, M.D., Mercer
Auxiliary Advisory	3 years	Frederick W. Durham, M.D., Camden

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Carl Alper, Ph.D., Director, or
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CMDNJ — New Jersey Medical School



We have reached another milestone in the growth of the College of Medicine and Dentistry of New Jersey. Last month the new, \$56.5-million Medical Science Building, keystone of medical education and research in the northern part of the state, was opened. The move into the new building, on a department-by-department basis, is expected to take most of the spring and summer. The Medical Science Building is the last of the academic structures on our permanent, \$200-million Newark campus. The building, faced in concrete and tinted glass, blends architecturally as well as functionally with the rest of the campus. Rectangular in shape, it has 345,000 square feet of usable space, divided among lecture halls, teaching laboratories, classrooms, research laboratories, and administrative offices. Support services for the new campus also are located there. The east wing, which connects with the library, will house the basic-science departments—anatomy, biochemistry, microbiology and pharmacology; the west wing, abutting both the new teaching hospital and the dental school, will house clinical education departments—medicine, surgery, and obstetrics and gynecology.

When the 486-bed teaching hospital, which will replace Martland (target date 1978), is completed, the clinical education departments will connect directly with patient-care units of the same specialty in the hospital, giving faculty and students easy access to both.

Located in a three-level link which connects the medical and dental schools, are three large lecture halls, two with 290 seats each and one with 124 seats. Tiers of seats with writing surfaces slope downward to a stage with a rear-projection screen. Acoustical panels on the walls serve to make speakers audible while providing an attractive, textured surface for the walls. Overhead, spotlights dot the ceiling.

Also contained in the new buildings are administrative offices, teaching laboratories, and student and faculty lounges. The five upper levels house faculty offices and research laboratories of the teaching departments. Laboratories are serviced by a central shaft which permits repair and maintenance of lines without interrupting operations. Readily accessible from each laboratory are special safety devices,

such as emergency shower units. Refrigeration and sterilization rooms and darkrooms also are located in each bank of laboratories.

Already in full use on the permanent campus are the CMDNJ-New Jersey Dental School, the CMDNJ-George F. Smith Library of the Health Sciences, and the CMDNJ-New Jersey Medical School Community Mental Health Center. Groundbreaking for the complex of interrelated buildings took place in July 1971.

Stanley S. Bergen, Jr., M.D.
President, CMDNJ

Therapeutic Drug Information Center*

1. Is there a drug interaction between digoxin and antacids?

Adsorption of drugs to various antacids is a well recognized problem, leading to variability in absorption and bioavailability of the drugs. Preliminary *in vitro* and *in vivo* studies indicated a possible interaction between digoxin and antacids when administered simultaneously.

Khalil¹ was the first to observe that magnesium trisilicate *in vitro* delayed the dissolution of digoxin tablets possibly because digoxin is adsorbed on magnesium trisilicate. However, Loo, *et al.*,² in a cross-over study in dogs found no significant difference in rates of absorption of digoxin tablets when administered with or without antacids.

Brown and Juhl³ studied the effect of concurrent administration of digoxin with antacids or kaolin-pectin mixture

*The Schwartz Inter-National Pharmaceutic and Therapeutic Drug Information Center of the Brooklyn College of Pharmacy, Long Island University, compiles the information contained in this column each month. The Center serves as a source of intelligence on therapeutic and pharmacologic information not readily available to physicians, at no charge to them, and provides this information with minimal time involvement. It is staffed by trained pharmacists; Jack M. Rosenberg, Pharm. D., Associate Professor and Chairman, Division of Clinical Pharmacy, Brooklyn College of Pharmacy, is Director and Walter Modell, M.D., Emeritus Professor of Pharmacology at Cornell University Medical College, is pharmacologist consultant. The service is available Monday through Friday from 9 a.m. to 4:30 p.m.—telephone (212) 622-8989 or 303-2735. The following are questions and answers handled by the Center recently.

This month's column was prepared by J. M. Rosenberg, M.S., Pharm. D., M. K. Raina, M. Pharm., Ph.D., P. M. John, B.S., R. Ph., Brooklyn College of Pharmacy, LIU.

(Kaopectate®) and its significance on bioavailability. Ten volunteers in normal health were given 0.75 mg digoxin orally alone, or in combination with 60 ml each of either aluminum hydroxide gel, magnesium hydroxide, magnesium trisilicate, or kaolin-pectin mixture. Bioavailability of digoxin was measured by the areas under serum concentration curve for eight hours as well as cumulative urinary excretion of digoxin for six days. Both the antacids and Kaopectate® depressed the peak plasma levels of digoxin and correspondingly decreased the total amount of digoxin excreted in urine.

Van der Vijgh, *et al.*,⁴ studied the *in vitro* and *in vivo* effects of magnesium perhydrol (magnesium peroxide—used in Europe as an antacid) on the bioavailability of digoxin. Their studies suggested that magnesium perhydrol in contact with gastric juice liberates hydrogen peroxide which causes decomposition of digoxin resulting in reduced plasma levels of digoxin. This drug-drug interaction was confirmed by thin layer chromatography.

In conclusion, there seems to be an apparent drug interaction when digoxin is administered with certain antacids or kaolin-pectin mixture. Should the patient require antacid or kaolin-pectin therapy, it may be advisable to give these products a few hours after the digoxin dosage.

References

- ¹ Khalil SAH: The uptake of digoxin and digitoxin by some antacids. *J. Pharm Pharmacol* 26:961-967, 1974.
- ² Loo JCK, *et al.*: Effect of an antacid on absorption of digoxin in dogs. *J Pharm Sci* 64:1727-1728, 1975.
- ³ Brown DD and Juhl RP: Decreased bioavailability of digoxin due to antacids and kaolin-pectin. *N Engl J Med* 295: 1034-1037, 1976.
- ⁴ van der Vijgh WJF, *et al.*: Reduced bioavailability of digoxin by magnesium perhydrol. *Drug Intell Clin Pharm* 10:680-683, 1976.

2. Please supply information about glyburide?

Glyburide (also known as glibenclamide) is an oral anti-diabetic agent belonging to the sulfonylurea group. This "second generation" sulfonylurea drug is under investigation by Upjohn and Hoechst-Roussel in the U.S. It is commercially available in Canada (DiaBeta®), England (Daonil®), Germany Daonil®; Euglucon®) and other countries.

Glyburide is well absorbed orally and is utilized for the treatment of adult-onset diabetes mellitus. Like other sulfonylureas, it lowers blood sugar by stimulating release of insulin from the beta cells of the pancreas in both normal and diabetic patients. On a weight-to-weight basis glyburide is approximately 200 times more potent than tolbutamide (Orinase®) and 50 times more than chlorpropamide (Diabinese®).¹

Clinical and metabolic effects of glyburide are well documented. Anderson, *et al.*,² Bhatia, *et al.*,³ and O'Sullivan, *et al.*,⁴ reported the effective hypoglycemic action of gly-

buride in maturity onset diabetic patients who were treated with oral doses that ranged from 2.5 to 20 mg per day for periods varying from eight to sixteen months. Davidson, *et al.*,⁵ in a study on 135 patients with maturity onset diabetes, showed that glyburide not only was effective in newly diagnosed patients, but also in those who were considered secondary failures to chlorpropamide or tolbutamide.

Several studies, specifically comparing the effects of glyburide with chlorpropamide, have shown no significant differences between the two drugs in lowering the blood sugar. Clark and Campbell⁸ conducted a long-term comparative trial of glyburide and chlorpropamide in 321 diet-failed, non-obese, maturity onset, newly diagnosed diabetics. Glyburide was given in a dose of 5 to 15 mg taken before breakfast and increased if necessary to a maximum of 30 mg daily. Chlorpropamide was administered in an initial dose of 100 to 250 mg and increased if necessary to a maximum of 375 mg daily given as a single dose. The analysis of results on 255 patients who completed the two-year trial indicated no significant difference between the two sulfonylureas when compared on a long-term basis. However, primary failures were significantly less in the chlorpropamide group as compared to the glyburide group. The frequency of side effects was low with both the sulfonylureas, however, hypoglycemic episodes were more common in the glyburide group. (Eight cases of hypoglycemia, five of which required hospitalization, were reported with glyburide as compared to three cases of mild severity reported with chlorpropamide.)

In conclusion, it appears that glyburide is a potent hypoglycemic agent. Reports appeared where it was used successfully in some cases that showed secondary failures to other sulfonylureas; however, it may carry a greater risk of causing hypoglycemic reactions.

References

- ¹ Anon: *Martindale the Extra Pharmacopoeia*, 26th edition, London, *The Pharmaceutical Press*, 1972, p. 966-967.
- ² Anderson J, *et al*: Clinical and metabolic study in diabetic patients treated with glibenclamide. *Br Med J* 2:568-570, 1970.
- ³ Bhatia SK, *et al*: Glibenclamide therapy in diabetes mellitus. *Br Med J* 2:570-572, 1970.
- ⁴ O'Sullivan DJ, *et al*: Blood glucose variations and clinical experience with glibenclamide in diabetes mellitus. *Br Med J* 2:572-574, 1970.
- ⁵ Davidson M, *et al*: Metabolic and clinical effects of glibenclamide. *Lancet* 1:57-61, 1970.
- ⁶ Hamblin JJ, *et al*: A comparative study of glibenclamide and chlorpropamide (preliminary report). *Postgrad Med J* (suppl) 46:92-94, 1970.
- ⁷ Gurling KJ: A comparison of glibenclamide with chlorpropamide in newly diagnosed diabetics. *Postgrad Med J* (suppl) 46:66-69, 1970.
- ⁸ Clarke BF, *et al*: Long-term comparative trial of glibenclamide and chlorpropamide in diet-failed, maturity-onset diabetics. *Lancet* 1:246-248, 1975.

Report from the Foundation

Daniel J. O'Regan, M.D., Medical Director

By the time you read this the cold and snow should be gone and the forsythia should be attracting your admiration. The stirrings of Spring should be apparent in Bergen, Hudson, and Union counties as their Planning PSROs start their activities.

You also may be seeing activity in Area VII—where a new physician group will take on the responsibility of quality assurance. We still have an excellent opportunity to have all areas of the State represented by physician-generated and operated PSROs. The deadline of January 1, 1978 can remove that possibility forever, and open the door to other forms of utilization review with little or no input from you or your colleagues. The lost poll in Area VII has been reported here and elsewhere. The 1400 physicians who did not respond at all may have had second thoughts by now. There may not be another opportunity to voice your opinion; if there should be another poll, you owe it to yourself and your patients to respond.

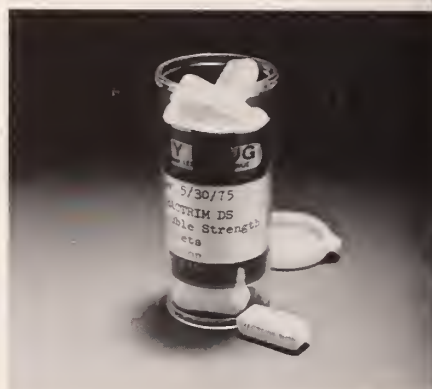
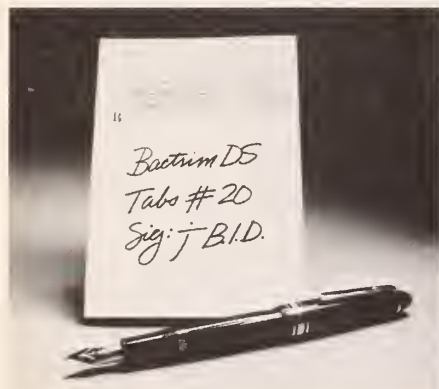
There are now ten (10) forms of prepaid health care in various stages of development in New Jersey. HMO, IPA, and FMC are no longer symbols recognized only by western physicians. Our Committee on IPA (Individual Physicians Association), directed by Dr. Richard Lang, is studying this aspect of prepaid care. It comes closest to preserving the tradition of free choice of physician and patient of all such arrangements. It permits you to work in your office as usual. It allows *you* to organize the delivery of care, rather than having others do it for you.

In recent discussions with Medicaid physician leaders, it was brought out that many participating physicians can reduce problems with and dissatisfaction about reimbursement arrangements by familiarizing themselves with the Medicaid Manual. This sets forth the regulations under which the State Medicaid Agency operates, and also clearly spells out what qualification for payment is required under various categories. The types of office visits, consultations, and other examinations are described.

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NOTE: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in these urinary tract infections. The recommended quantitative disc susceptibility method (*Federal Register*, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. **Data are insufficient to recommend use in infants and children under 12.**

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprolthrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions,

epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12. Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
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15-30	1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) every 24 hours
Below 15	Use not recommended

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole — bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10.

Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole; fruit-licorice flavored — bottles of 16 oz (1 pint).



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PHYSICIANS SEEKING LOCATION IN NEW JERSEY

The following physicians have written to the Executive Office of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ANESTHESIOLOGY—Lessly V.T. Sebastian, M.D., 353 East 17th Street, Apt. 8-C, New York, New York 10003. National (Taiwan) 1965. Board eligible. Group or partnership. Available July 1977.

Patricia Wood, M.D., 45 Cleveland Lane, Princeton 08540. New Zealand 1960. Subspecialty, general practice. Group, partnership, hospital-based. Available.

Kuang Ming Chen, M.D., 130 West 12th Street, Apt. 7-J, New York 10011. Kaohsiung (Taiwan) 1971. Board eligible. Partnership or solo. Available July 1977.

Manjit S. Chowdhary, M.D., 1601 18th Street, NW., Apt. 205, Washington, D.C. 20009. Maulana Azad Medical College (India) Board certified. Group, partnership, solo. Available July 1977.

CARDIOLOGY—Harrison Y.N. Yang, M.D., 1901 Dorchester Road, Apt. 5-B, Brooklyn, New York 11226. Taiwan 1970. Subspecialty internal medicine. Board eligible (IM) Hospital-based practice in cardiology, or teaching post. Available July 1977.

Lalji S. Chudasama, M.D., 49 Murdock Court, Apt. 4-J, Brooklyn, New York 11223. Makerere (Uganda) 1968. Subspecialty, internal medicine. Board certified (IM). Group, partnership, solo. Available July 1977.

FAMILY PRACTICE—Robert Cappa, M.D., 6402 Greyfield Road, Fayetteville, North Carolina 28303. Mt. Sinai (NYC) 1971. Board eligible. Group or partnership. Available July 1977.

GASTROENTEROLOGY—Elliot H. Borak, M.D., 505 East 14th Street, New York, New York 10009. NYU 1970. Board eligible. Group. Available July 1977.

Bernard M. Aaron, M.D., 44 Gristmill Drive, Kings Park, New York 11754. SUNY (Downstate) 1969. Subspecialty, internal medicine. Board certified (gastroenterology and IM) Group or partnership. Available July 1977.

GENERAL PRACTICE—Soon Ha Park, M.D., 1359 West 83rd Street, Apt. 302, Cleveland, Ohio 44102. Korea 1964. Group or solo. Available July 1977.

Wan Soo Chung, M.D., 306 South Main Street, Suffolk, Virginia 23434. Korea 1971. Solo (hospital-based). Available September 1977.

HEMATOLOGY/ONCOLOGY—Nancy S. Scher, M.D., 136 Kirkbride Road, Voorhees 08043. University of

Pennsylvania 1971. Subspecialty, internal medicine. Board certified (IM and hematology). Hospital-based or group. Available July 1977.

Barry Charles Freeman, M.D., 333 East 75th Street, New York, New York 10021. SUNY (Upstate) 1970. Subspecialty, internal medicine. Board certified (IM and hematology). Group or partnership. Available July 1977.

HOUSE PHYSICIAN—Rukhsana Mughal, M.D., 6879 Hickory Hill Drive, Mayfield, Cleveland, Ohio 44143. Dow (Karachi, Pakistan) 1973. Any specialty. Available.

INTERNAL MEDICINE—Paul Hess, M.D., 585 Richardson Road, Rochester, New York 14623. Cornell 1972. Subspecialty, cardiology. Board certified. Hospital-based, group, partnership. Available July 1977.

Surinder S. Thind, M.D., 3901 Conshohocken Avenue, Apt. 190, Philadelphia, Pennsylvania 19131. Ludhiana (India) 1968. Subspecialty, cardiology. Board eligible. Group or solo. Available July 1977.

Suketu H. Nanavati, M.D., 353 East 17th Street, New York, New York 10003 (Apt. 9-B). Bombay (India) 1969. Subspecialty, cardiology. Board certified. Solo or partnership. Available July 1977.

Charles Schiffer, M.D., 4 Grant Court, Guilderland, New York 12084. Cincinnati 1970. Subspecialty, nephrology. Board certified. Group or partnership. Available July 1977.

A.K. Patel, M.D., 1770 Grand Concourse, Apt. 8-K, Bronx, New York 10457. Ranchi (India) 1968. Subspecialty, gastroenterology. Board eligible. Solo or partnership. Available July 1977.

Steven Koval, M.D., 3221 Oxford Avenue, Bronx, New York 10463. SUNY (Downstate) 1973. Board certified. Group or partnership. Available July 1977.

Henry A. Schechter, M.D., 3671 Hudson Manor Terrace, Bronx, New York 10463. Einstein 1964. Subspecialty, nephrology. Group or partnership. Available.

OBSTETRICS/GYNECOLOGY—Howard Grabelle, M.D., 20 Slayback Drive, Princeton Junction 08550. CMDNJ 1969. Board eligible. Group or partnership. Available July 1977.

Tzung-Lin Huang, M.D., 3021 Northgate Drive, Youngstown, Ohio 44505. Taipei (Taiwan) 1970. Solo or partnership. Available July 1977.

N.K. Gupta, M.D., 1650 Selwyn Avenue, Apt. 8-B, Bronx, New York 10457. M.A.M. College (Dehli) 1975. Group, partnership, solo. Available July 1978.

Kuo Juh Chan, M.D., 6152 Parkway Drive, Baltimore, Maryland, 21212. Taipei (Taiwan) 1970. Board eligible. Group, partnership, solo, or hospital-based. Available July 1977.

OPHTHALMOLOGY—Lorin R. Press, M.D., 204-A Overmount Avenue, West Paterson 07424. CMDNJ 1973. Board eligible. Group or partnership. Available July 1977.

ORTHOPEDIC SURGERY—Roy B. Friedenthal, M.D., 6049 Huxley Ave., Bronx, New York 10471. New York Medical College 1973. Board eligible. Solo, partnership, single specialty group. Available July 1977.

PATHOLOGY/HEMATOLOGY—Jack Sanford Weinstein, M.D., P.O. Box 368, South Orange 07079. CMDNJ 1966. Board certified (pathology). To associate in hospital practice. Available June 1977.

PEDIATRICS—Ronald S. Bashian, M.D., 2521 South Meridian Drive, Great Lakes, Illinois 60088. SUNY (Downstate) 1972. Board eligible. Pediatric or multi-specialty group. Available July 1977.

Mark B. Levin, M.D., 5100 Highbridge St., Apt. 50-E, Fayetteville, New York 13066. SUNY (Syracuse) 1974. Group, partnership, solo. Available July 1977.

Gianmaria Minervini, M.D., 374 Getz Avenue, Staten Island, New York 10312. NYU 1973. Board eligible. Solo, associate, or small group. Available July 1977.

Chalerm Sunhachawee, M.D., 112 Washington Street, Warsaw, New York 14569. Siriraj (Thailand) 1966. Board certified. Group, partnership, or solo. Available July 1977.

Shrikrishna K. Mate, M.D., 1945 Corlies Avenue, Neptune 07753. Sethgorhandas (India) 1972. Board eligible. Group, solo, partnership. Available July 1977.

PHYSICAL MEDICINE/REHABILITATION—Daniel R. Ignacio, M.D., 17-F Clintwood Drive, Rochester, New York 14620. Far Eastern (Philippines) 1973. Board eligible. Hospital-based practice. Available July 1977.

PSYCHIATRY—Sureshchandra N. Desai, M.D., King Edward Building, Apt. B-411, 79-11 41st Avenue, Elmhurst, Queens, New York 11373. Baroda (India) 1969. Subspecialty, child psychiatry. Board certified. Hospital-based clinic, academic group, partnership, solo, Available August 1977.

Angeline C. N. Desai, M.D., King Edward Building, Apt. B-411, 79-11 41st Avenue, Elmhurst, Queens, New York 11373. Ceylon (Sri-Lanka). Subspecialty, child psychiatry. Board certified. Hospital-based clinic, academic, group, partnership, solo. Available August 1977.

RADIOLOGY—Richard B. Circeo, M.D., 369 Coral Sea Circle, Fort Lee, Virginia 23801. Tufts 1961. Special interest—diagnostic radiology. Board certified. Solo or group. Available August 1977.

RHEUMATOLOGY—Lawrence Russomanno, M.D., 702 Charlesgate Circle, East Amherst, New York 14051. Bologna (Italy) 1972. Subspecialty, internal medicine. Board certified (IM). Clinical practice as associate or partner. Available July 1977.

SURGERY—Subhahs R. Puranik, M.D., 1835 Franklin Street, Denver, Colorado 80218. Poona (India). subspecialty, pediatric surgery. Group, partnership, or solo. Available July 1977.

Charles P. Clericuzio, M.D., 54 Victoria Place, Red Bank 07701. Wisconsin 1971. Subspecialty, vascular surgery. Group, partnership, or hospital-based academic/teaching position. Available July 1977.

Narayanan Ponnusamy, M.D., 1770 Grand Concourse, Apt 7-F, Bronx, New York 10457. Madurai (India) 1969. Institutional (surgical house officer). Available July 1977.

Luis A. Palma, M.D., 44 Linden Street, Apt. 7-B, Pittsfield, Massachusetts 01201. Cordoba (Argentina) 1968. Board eligible. Any type practice. Available July 1977.

Sang T. Park, M.D., 9324 Pickwick Circle, W. Bldg. 4, Taylor, Michigan 48180. Kyongbuk (Korea) 1968. Board eligible. Group, partnership, solo. Available July 1977.

Eli Anker, M.D., 3450-28 Wayne Avenue, Bronx, New York 10467. Einstein 1972. Subspecialty, vascular surgery. Board eligible. Group, partnership, solo. Available July 1977.

Carlos A. Medina, M.D., 66-53 69th Street, Middle Village, New York 11379. Colombia 1971. Board eligible. Group. Available July 1977.

UROLOGY—Steven L. Sholem, M.D., P.O. Box 335, 1061 Segovia Drive East, Litchfield Park, Arizona 85340. Columbia 1969. Board eligible. Associate or solo. Available July 1977.

H. Barry Opell, 1275 East 51st Street, Brooklyn, New York 11234. Lausanne (Switzerland) 1971. Board eligible. Partnership, solo, group. Available.

Hazem El-Droubi, 265-C Hackett Boulevard, Albany, New York 12208. Ain-Shams University 1969. Board eligible. Group or partnership. Available July 1977.

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WRITE FOR REPRINT: R. B. Greenblatt, M.D., R. Witherington, M.D., I. B. Sipahoglu, M.D. "Hormones for Improved Sexuality in the Male and Female Climacteric." *Drug Therapy*, Sept. 1976.

Is there a true aphrodisiac? How effective are androgens in the management of the male climacteric and male impotence? Article discusses the psychophysiological and hormonal changes in the elderly male and female and therapeutic considerations. The effectiveness of methyltestosterone in the management of male impotence was confirmed by a cross-over, double-blind study using a placebo and Android-25

(methyltestosterone 25 mg.), on 20 males, 50 years of age or older who complained of secondary impotence. Patients received a series of placebo then Android-25, or Android-25 then placebo as follows: 1 tablet/30 days, 2 tablets/30 days; 3 tablets/30 days. Sexual response was evaluated: 0 = no change; + = 25% improvement; ++ = 50% improvement; +++ = 75% improvement. Placebo effectiveness was + or ++ in 12.7% of trials. Android-25 elicited a +, ++ or +++ response in 47.2% of trials. There was often a dose related response not observed with the placebo. This effect was not observed in younger patients (age 28-45 years).

DESCRIPTION: Methyltestosterone is 17 β -Hydroxy-17-Methylandroster-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunuchism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-pubertal cryptorchidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric,

avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE**

REACTIONS: Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. In the male: Eunuchoidism and eunuchism, 10 to 40 mg. Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpubertal cryptorchidism, 30 mg. **REFERENCE:** Robert B. Greenblatt, M.D., and D. H. Perez, M.D.: "The Menopausal Syndrome," *Problems of Libido in the Elderly*, pp. 95-101. Medcom Press, N.Y., 1974. **HOW SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only

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LETTER TO THE JOURNAL

Required Reading for Bureaucrats

February 16, 1977

Dear Dr. Krosnick:

I must tell you that I think your editorial in the current *Journal*, with reference to "The Swine

Influenza Vaccine Lesson" is the best thing I have read in months (*JMSNJ* 74:107-108, 1977).

It is unfortunate that it cannot be made required reading for those State and national health agency bureaucrats, who should have to read it every day for a month.

My heartiest congratulations and thanks.

(Signed) Harry F. Suter, M.D.

OBITUARIES

Dr. J. Arthur Byrne

Word has just been received of the death in Florida on January 27 of J. Arthur Byrne, M.D., formerly of Morristown. A native of Prince Edward Island, Canada, and born in 1901, Dr. Byrne was graduated from McGill University Medical School in 1926 and went on to graduate study in otolaryngology. He became board certified in that specialty and established a practice in Morristown. Dr. Byrne was associated throughout the years at Newton Memorial, St. Clare's in Denville, and All Souls and Memorial Hospitals in Morristown. He was a Fellow of the American College of Surgeons, a Fellow of the American Academy of Ophthalmology and Otolaryngology, and a member of the prestigious New Jersey Society of Surgeons.

Dr. Anthony J. Cilento

At the untimely age of 34, Anthony J. Cilento, M.D., died on February 5 at his home in Oceanport after a long illness. Dr. Cilento was a native of New Jersey and a graduate of Georgetown University Medical School in 1968, where he also completed a residency in pediatrics. He took a further residency in neonatology at Monmouth Medical Center in Long Branch where he had recently accepted appointment to the staff. Dr. Cilento was a fellow of the American Academy of Pediatrics.

Dr. Geoffrey W. Esty

Geoffrey Winslow Esty, M.D., of Princeton, died on February 9 at the Medical Center there. Born in Brookline, Massachusetts in 1904, Dr. Esty received his medical degree from Harvard Medical School in 1931. He served a pediatric internship and residency at Children's Hospital in Boston and at Babies' Hospital in New York and participated in further graduate study in pediatrics in Switzerland. He was a diplomate of the American Board of Pediatrics and practiced that specialty in Westfield from 1934 to 1942. There followed three years in the Medical Department of the Army of the United States and upon discharge Dr. Esty accepted a full-time position as pediatrician with the New Jersey Bureau of Maternal and Child Health, supervising the baby-keep-well stations and instructing physicians and public health nurses in preventive pediatrics. He held numerous other state appointments in the health field including director in the Division of Constructive Health, district state health officer, and special consultant in school health, retiring in 1965 to pursue activities in teaching, lecturing, and writing. Dr. Esty was a fellow of the American Academy of Pediatrics and of the American Public Health Association and had been affiliated with the New Jersey Welfare Council, the Mental Health Commission, the State Crippled Children Commission, the New Jersey Association for Retarded Children, the New Jersey Conference on the Handicapped, the New Jersey Nutrition Council, and the Commission on the Handicapped.

Dr. Samuel L. Kaman

We have just learned of the death on December 28, 1976, of Samuel L. Kaman, M.D., in Pompano Beach, Florida where he had retired in 1970 for reasons of health. Dr. Kaman was graduated from University of Iowa Medical School in 1928 and practiced general medicine and geriatrics in Atlantic City for many years. He was associated with the Medical Center there and was a member of the American Academy of Family Physicians. Dr. Kaman was 74 years old at the time of his death.

Dr. Frank W. Konzelmann

One of Atlantic County's senior members, Frank W. Konzelmann, M.D., of Somers Point, died on February 6. A native of Philadelphia, where he earned his medical degree at Jefferson Medical College in 1919, Dr. Konzelmann pursued graduate work in pathology and was a diplomate of the American Board of Pathology. He had been director of laboratories at Atlantic City Hospital and more recently at Shore Memorial Hospital in Somers Point. Dr. Konzelmann had been on the faculty in the department of pathology at Jefferson Medical College and Temple University Medical School. For one ten-year period he left this area and was director of Laboratories at Emergency Hospital in Washington, D.C. and Washington Sanatorium in Tacoma Park, Maryland. Dr. Konzelmann was a member of the American Society of Clinical Pathology, the Pathological Society of New Jersey, the Pathological Society of Philadelphia, and the Philadelphia College of Physicians. He was 83 years old at the time of his death.

Dr. Cornelius J. Regan

Cornelius J. Regan, M.D., a member of our Burlington County component, died on January 30 at his home. Born in 1916 and graduated from Hahnemann Medical College, class of 1942, Dr. Regan pursued a career in anesthesiology and was associated in that department with the South Jersey Division of West Jersey Hospital. He had previously been on the staff in that same capacity at Burlington County Memorial Hospital in Mount Holly and at the Underwood Hospital in Woodbury. Dr. Regan

was a member of the American and New Jersey Societies of Anesthesiologists.

Dr. Arthur W. von Deilen

One of Camden County's senior members, Arthur W. von Deilen, M.D., died at his home on January 27. A native of New Jersey, born in 1905, Dr. von Deilen was graduated from Hahnemann Medical College in 1943 and went on to take graduate work in plastic and reconstructive surgery, becoming board certified in that field. Dr. von Deilen established a practice in Collingswood, and his hospital affiliations included Presbyterian Hospital and Wills Eye Hospital in Philadelphia, West Jersey, Cooper and Our Lady of Lourdes Hospitals in Camden, and Burlington County Memorial Hospital in Mount Holly. He was a fellow of the American College of Surgeons and a member of the American Society of Plastic and Reconstructive Surgeons and of the New Jersey Society of Surgeons.

Dr. Ronald J. Walsh

At the grand age of 80, Ronald Joseph Walsh, M.D., formerly of Elizabeth and a member of our Union County component, died on January 14 in Coral Gables, Florida where he was living in retirement. A graduate of McGill University Medical School in 1925, Dr. Walsh practiced ophthalmology in the Elizabeth area for many years until retirement in 1968. He had been associated with Alexian Brothers and St. Elizabeth Hospitals.

Dr. Abbas S. Yazdi

We have just learned of the accidental death, while visiting in Tehran in January, of Abbas S. Yazdi, M.D., a member of the Sussex County Medical Society. Formerly a member of our Essex County component with offices in Orange, Dr. Yazdi briefly practiced in South Carolina and Nebraska before returning to New Jersey last year. Born in Bombay on Christmas Day 1920, he was graduated from the Medical College at Tehran University, class of 1961. Dr. Yazdi practiced family medicine and had been associated with St. Mary's and the Hospital Center at Orange, and the East Orange General Hospital.

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Composition: Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg.
Vasodilan injection, isoxsuprine HCl, 5 mg. per ml.

Dosage and Administration: Oral: 10 to 20 mg., three or four times daily
Intramuscular: 5 to 10 mg. (1 or 2 ml.) two or three times daily. Intramuscular administration may be used initially in severe or acute conditions.

Contraindications and Cautions: There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Parenteral administration is not recommended in the presence of hypotension or tachycardia.

Intravenous administration should not be given because of increased likelihood of side effects.

Adverse Reactions: On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.

Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted.

Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses. For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed.

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ANNOUNCEMENTS

Seminars in Emergency Medical Care

The Inter-Agency Commission on Emergency Medical Care, in cooperation with The Medical Society of New Jersey, will conduct seminars in emergency medical care for physicians at the following hospitals on the dates noted:

St. Joseph's Medical Center, Paterson

April 6
April 13
April 20

Cooper Medical Center, Camden

April 6
April 13
April 20

Middlesex General Hospital, New Brunswick

April 28
May 5
May 12

Monmouth Medical Center, Long Branch

May 25
June 1
June 8

St. Elizabeth Hospital, Elizabeth

June 1
June 8
June 15

The subjects are the same at each hospital: cardio-respiratory emergencies (1st day), trauma in all specialties (2nd day), and pediatric, otolaryngology, ophthalmology, and dermatology emergencies (3rd day). Application has been made for Category I accreditation. A complete program and registration form have been sent to all physicians. For additional information, please communicate with Jack R. Karel, M.D., Chairman, Inter-Agency Commission on Emergency Medical Care, 115 North Avenue, Hillside 07205.

Course in Pediatric Clinical and Theoretical Allergy

In cooperation with the New Jersey Medical School, CMDNJ, the Children's Hospital of Newark is sponsoring a review course in clinical problems in pediatric allergy designed for pediatricians, family physicians, and allergists.

The program runs from September through May. Lectures are held each Thursday from 11 a.m. to 12 noon in the Chapel Conference Room at United Hospitals of Newark. In addition a pediatric allergy clinic will be held from 8:30 to 10 a.m. on each of these days, and from 12 noon to 1 p.m. there will be a pediatric conference. Hour-for-hour credit will be awarded in Category I of the AMA Physician's Recognition Award. Tuition is \$100. For information, please address a communication to Arthur F. Fost, M.D., Director of Allergy, Children's Hospital of Newark, 15 South 9th Street, Newark 07107.

The schedule for April and May is as follows:

Apr. 14—Drug Allergy
Apr. 21—Insect Allergy
Apr. 28—Pediatric Pulmonary Conference
May 5—Veterinary Allergy
May 12—Urticaria and Angioedema
May 19—Atopic Dermatitis
May 26—Pediatric Pulmonary Conference

Head and Neck Cancer Symposium

On April 14 the Fox Chase Cancer Center in Philadelphia is sponsoring a symposium on head and neck cancer for physicians and dentists. The session convenes at 9:30 a.m. at the center and the morning program will focus on detection and primary treatment of head and neck cancer. A panel discussion will precede luncheon and the afternoon program is concerned with reconstruction, adjuvant treatment, and rehabilitation of head and neck cancer, followed by a panel discussion. For details and registration information, please communicate with Joseph G. Strawitz, M.D., American Oncologic Hospital, Central and Shelmire Avenues, Philadelphia 19111.

Seminars in Psychiatry

The Medical Center at Princeton has announced its sponsorship of the following programs. Each session convenes at 12:30 p.m. at the Princeton House, the psychiatric facility

affiliated with the Medical Center. AMA Category I credit will be awarded for attendance.

Apr 21—Community Mental Health Center and the
Private Psychiatrist

Robert Leopold, M.D.
Professor of Psychiatry
University of Pennsylvania

Apr 28—Forensic Psychiatry, Part I

Robert Sadoff
Assoc. Professor of Psychiatry
University of Pennsylvania

May 12—Meditation

Gerald May, M.D.

May 19—Forensic Psychiatry, Part II

Robert Sadoff, M.D.

Lectures on Surgery

The Department of Surgery of Rutgers Medical School, CMDNJ, has announced the following program in its Visiting Professor Lecture series:

May 3—Childhood Injuries

J. Alex Haller, Jr., M.D.
Johns Hopkins University

June 7—Biology of Surgical Infection

Thomas J. Krizek, M.D.
Yale School of Medicine

Lectures are presented at 5 p.m. in the main auditorium at the school. For further information, please communicate with John H. Landor, M.D., Professor and Chief, Division of General Surgery, Rutgers Medical School, CMDNJ, University Heights, Piscataway 08854.

Symposium on Prevention of Birth Defects

On May 22 from 9 a.m. to 4 p.m. the Genetic Counseling Program of Albert Einstein College of Medicine, Bronx, New York, will conduct a symposium entitled "Prevention of Birth Defects and Genetic Disease: Recognition of Environmental Hazards and New Diagnostic Approaches." Topics covered will include effects of radiation, maternal hormone exposure, infections, and various pharmaceuticals on the developing fetus. Recent advances in prenatal diagnostic techniques such as sonography, alpha-fetoprotein assay, and amniocentesis will be discussed. The program has been approved for six hours in Category I of the AMA Physician's Recognition Award. Registration fee is \$25 for practicing physicians, \$10 for residents.

For further information please communicate with Harold M. Nitowsky, M.D., Albert Einstein College of Medicine, 1410 Pelham Parkway South, Bronx, New York 10461.

Central Jersey Chest Conference

The Central New Jersey Regional Chest Conference, cosponsored by the New Jersey Thoracic Society and the Delaware-Raritan Lung Association, will meet on Thursday, May 5, from 4 to 6 p.m. at the Rutgers Medical School, Piscataway. Conference speaker is Oscar Auerbach, M.D., Senior Medical Investigator, VA Hospital, East Orange, and the title of his presentation is "Changes in the Tracheobronchial Tree in Relationship to Cigarette Smoking and Lung Cancer—Human and Experimental." The program has been approved for two credit hours in Category I of the AMA Physician's Recognition Award.

Gynecologic Laparoscopy

The New Jersey Fertility Foundation will sponsor a course in gynecologic laparoscopy in Roselle Park on June 3 and 4 and October 14 and 15. The course has been accredited for 20 ACOG cognates and for 13 hours in AMA Category I. For information please communicate with Sidney A. Wilchins, M.D., 14 East Westfield Avenue, Roselle Park, New Jersey 07204.

Course in Gynecologic Endoscopy

On June 9 and 10 and again on October 13 and 14 in Roselle Park, the New Jersey Fertility Foundation will sponsor a course in gynecologic endoscopy. Accreditation will be given for 20 ACOG Cognates and 13 hours in AMA Category I. For information please communicate with G. E. Laubach, M.D., 14 East Westfield Avenue, Roselle Park, New Jersey 07204.

Radiology Course in Bermuda

From October 24 to 28, at the Southampton Princess Hotel in Bermuda, Duke University Medical Center (Department of Radiology) will sponsor a graduate course in radiology. Scientific sessions will be held each day from 8 a.m. to 1 p.m. Topics to be covered are pediatric and

adult radiology, including ultrasound and CT scanning. Twenty-five credit hours in Category I of the AMA Physician's Recognition Award will be given. Inquiries should be directed to Robert McLelland, M.D., Radiology—Box 3808, Duke University Medical Center, Durham, North Carolina 27710.

Project USA

Project USA, the American Medical Association's program to recruit physicians for short-term service (usually two weeks), needs volunteers for the Indian Health Service facilities and for the National Health Service Corps in rural communities. Physicians receive \$500 a week plus round trip air fare (coach) and family housing accommodations.

Liability insurance coverage is furnished under the Federal Torts Claims Act for service on Indian reservations. Physicians must provide their own liability insurance for other sites; however extension of existing coverage for short-term services is a simple procedure and the expense, if any, involved in that process will be assumed by Project USA.

Interested physicians should communicate with John Naughton, AMA, 535 North Dearborn Street, Chicago 60610.

Study of Patients with Pituitary Tumors

Cooperation is requested in the referral of patients with pituitary tumors (exclusive of those patients with acromegaly) for a study being conducted by the National Institute of Child Health and Human Development and the National Institute of Arthritis and Metabolic Diseases at the Clinical Center, National Institutes of Health, Bethesda, Maryland.

Patients will receive a complete evaluation of their pituitary tumor and endocrine status, and will be considered for a randomized therapeutic program which will necessitate a long-term follow-up in collaboration with the referring physician. A summary of the workup, findings, and disposition will be sent to the referring physician.

Physicians interested in having their patients considered for admission may write or telephone Charles A. Strott, M.D., NIH, NICHD, Clinical Center, Room 10B-03, Bethesda, Maryland 20014, (301) 496-5909; or Ronald Kahn, M.D., NIH, NIAMDD, Clinical Center, Room 8N-238, Bethesda, Maryland 20014, (301) 496-2596.

MEETINGS OF MEDICAL INTEREST

This listing is compiled through the cooperation of the Committee on Medical Education of The Medical Society of New Jersey, the Academy of Medicine of New Jersey, the New Jersey Chapter of the American Academy of Family Physicians, and the Office of Continuing Medical Education of the College of Medicine and Dentistry of New Jersey. For information on accreditation, please contact the sponsoring organization(s), indicated by italics—last line of each item.

Apr.

11 The Practice of Couples Group Therapy
7-9 p.m. — various locations
(sponsored by AMNJ and N.J. Center for Family Studies)

11 Basic Science for Surgeons
18 3-4 p.m. — Martland Hospital, Newark
25 (Sponsored by Dept. of Surgery, N.J. Medical School and AMNJ)

11 Ovarian Neoplasms

14 Pulmonary Function Tests
18 Cardiac Catheterization
21 Swan-Ganz Catheter
25 Generalized Burn Care
28 Plastic Surgery and Skin Grafts
5-6 p.m. — St. Francis Medical Center, Trenton
(Sponsored by St. Francis Medical Center)

12 Computerized Tomography
6-10 p.m. — Hackensack Hospital, Hackensack
(Sponsored by Bergen County Society of Otolaryngologists and AMNJ)

- 12 Review Course in Internal Medicine-Rheumatology**
8-10 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 12 New Developments in Psychiatry and Law**
9-10:30 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center & AAFP)
- 12 Review and Update of Ob/Gyn**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 12 Acute and Chronic Hepatitis**
12 noon — West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 12 Collagen Disease**
8 p.m. — Paul Kimball Hospital, Lakewood
(Sponsored by AMNJ and AAFP)
- 12 Echo-Cardiography**
9 p.m. — Bayonne Hospital
(Sponsored by AMNJ and AAFP)
- 12 Effect of Medication of Laboratory Tests**
8-10 p.m. — 646 Valley Road, Maplewood
(Sponsored by Journal Club of Greater Newark and AMNJ)
- 13 Present Status of Huntington's Disease**
3:15-4:45 p.m. — Fair Oaks Hospital, Summit
(Sponsored by Fair Oaks Hospital and AMNJ)
- 13 Management of Coronary Heart Disease**
12:30 p.m. — Hoffmann-La Roche, Inc., Nutley
(Sponsored by Essex County Heart Association and AAFP)
- 13 Continuing Medical Education Series**
20 10:30-11:30 a.m. — Clara Maass Memorial Hospital,
27 Belleville
(Sponsored by Medical Staff, Clara Maass Mem. Hosp. and AAFP)
- 13 Grand Rounds in Ob/Gyn**
20 2-4 p.m. — New Jersey Medical School, Newark
27 (Sponsored by CMDNJ and AMNJ)
- 13 Allergy and Immunology**
20 7:30-8:30 a.m. — Alexian Bros. Hospital, Elizabeth
27 (Sponsored by Alexian Brothers Hospital and AAFP)
- 13 Urology and Hypertension Seminar**
9-11 a.m. — West Jersey Hospital, Voorhees
(Sponsored by West Jersey Hospital and AAFP)
- 13 Internal Medicine — 1977**
20 8:30-4:30 p.m. — Coachman Inn, Cranford
27 (Sponsored by Academy of Medicine of N.J. and AAFP)
- 13 Continuing Medical Education Program**
20 11:30 a.m. — Rahway Hospital, Rahway
27 (Sponsored by Rahway Hospital and AAFP)
- 13 Proper Use of Blood Gases**
1 p.m. — Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)
- 13 Current Surgical Techniques, Breast Cancer**
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 13 Headache**
11:30 a.m. — Rahway Hospital
(Sponsored by AMNJ and AAFP)
- 13 Cardiac Complications of Antidepressant Drugs and Major Tranquilizers**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 13 Sedative Management for the General Practitioner**
8:30 a.m.-4:15 p.m. — VA Hospital, East Orange
(Sponsored by AMNJ)
- 13 Endogenous Rhythms of Activity, CNS**
8:30-10:30 p.m. — Guido's Restaurant, Hackensack
(Sponsored by North Jersey Psychiatric Society and AMNJ)
- 13 Special Rounds, Pediatrics**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 13 Therapy of Ambulatory Patients Who Have Had Psychosis**
1-2:30 p.m. — Marlboro Psychiatric Hospital
(Sponsored by Marlboro Psychiatric Hospital and AMNJ)
- 13 Update on Collagen Disease**
10:30-12 noon — Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
- 14 Review Symposium — Malpractice**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 14 Drug Allergy**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 14 Inflammatory Bowel Disease**
28 **Multiple Sclerosis**
10:30 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 14 Elizabeth Tri-Hospital Endocrine Conferences**
28 8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)

- 14 Medical Grand Rounds**
21 9-10 a.m.—St. Elizabeth Hospital, Elizabeth
28 (*Sponsored by St. Elizabeth Hospital and AAFP*)
- 14 To be announced**
21 Alexithymia
28 Electroconvulsive Therapy
 12 noon—Carrier Clinic, Belle Mead
 (*Sponsored by Carrier Clinic*)
- 14 Basic Sciences and Clinical Applications**
21 3:30 p.m.—Burlington County Memorial Hospital, Mount Holly
 (*Sponsored by Burlington Co. Mem. Hospital and AMNJ*)
- 14 Neurosurgical Conferences**
21 4-5 p.m.—VA Hospital, East Orange
28 (*Sponsored by CMDNJ, VA Hospital, East Orange, and AMNJ*)
- 15 Childhood Rheumatoid Disease**
 10 a.m.—Monmouth Medical Center, Long Branch
 (*Sponsored by Monmouth Medical Center and AAFP*)
- 15 Cardiology Conferences**
22 7:30-8:30 a.m.—St. Elizabeth Hospital, Elizabeth
29 (*Sponsored by St. Elizabeth Hospital and AAFP*)
- 15 Community Psychiatry**
22 1:30-2:30 p.m.—Trenton Psychiatric Hospital
Mental Deficiency
 2:45-3:45 p.m.—Trenton Psychiatric Hospital
Forensic Psychiatry
 4-5 p.m.—Trenton Psychiatric Hospital
 (*Sponsored by Trenton Psychiatric Hospital*)
- 15 Scanning**
 12 noon—Freehold Area Hospital
 (*Sponsored by AMNJ and AAFP*)
- 16 Emergency Medicine**
 8:50 a.m.-2:45 p.m.—Ramada Inn, East Brunswick
 (*Sponsored by Philippine-American Medical Society and AMNJ*)
- 16 Advances in Orthopedic Surgery**
23 8:30-10:30 a.m.—N.J. Medical School, Newark
30 (*Sponsored by CMDNJ and AMNJ*)
- 17 Seminar in Medical Humanism**
 8:30-10 p.m.—Bergen Pines County Hospital, Paramus
 (*Sponsored by Bergen Pines County Hospital, Bergen County Medical Society and AMNJ*)
- 19 Cardiac Arrhythmias**
 12 noon—St. Mary's Hospital, Orange
 (*Sponsored by AMNJ and AAFP*)
- 19 Recent Advances in Cardiology**
 8:30-9:30 p.m.—Irvington General Hospital
 (*Sponsored by Irvington General Hospital and AMNJ*)
- 20 Rheumatology**
27 9-10:30 a.m.—West Jersey Hospital, Voorhees
 (*Sponsored by West Jersey Hospital and AAFP*)
- 20 New Concepts and Review of Internal Medicine**
 1-3 p.m.—Bayonne Hospital
 (*Sponsored by Bayonne Hospital and AMNJ*)
- 20 Cardiology Conferences**
 4-6 p.m.—Rutgers Medical School, Piscataway
 (*Sponsored by CMDNJ and AMNJ*)
- 20 Anatomy for Surgeons**
27 4-9 p.m.—Rutgers Medical School, Piscataway
 (*Sponsored by CMDNJ and AMNJ*)
- 20 Treatment of Obesity and Hypoglycemia**
 8:15 a.m.-5:30 p.m.—Rutgers Medical School, Piscataway
 (*Sponsored by Clinical Society, American Diabetes Assn., N.J. Affiliate, and AAFP*)
- 20 Corneal and Recurrent Erosions**
 5-8:30 p.m.—Hunterdon Medical Center
 (*Sponsored by Hunterdon Medical Center and AMNJ*)
- 20 Obesity and Hypoglycemia**
 9 a.m.-3:45 p.m.—Rutgers Medical School, Piscataway
 (*Sponsored by American Diabetes Association, N.J. Affiliate, and AMNJ*)
- 20 Common Medical Problems**
 8-9 a.m.—So. Ocean County Hospital, Manahawkin
 (*Sponsored by Burlington County Memorial Hospital and AAFP*)
- 20 Estrogen Replacement in Menopause**
 1 p.m.—Christ Hospital, Jersey City
 (*Sponsored by AMNJ and AAFP*)
- 20 Leukemia Patient**
 1-5 p.m.—Holiday Inn, Saddle Brook
 (*Sponsored by Leukemia Society of America, N.J. Chapter, and AMNJ*)
- 20 Child Abuse and Neglect**
 1 p.m.—Trenton Psychiatric Hospital
 (*Sponsored by AMNJ and AAFP*)
- 20 Pulmonary Pathology in Connective Tissue Disease**
 11:30 a.m.-12:30 p.m.—V.A. Hospital, East Orange
 (*Sponsored by V.A. Hospital, East Orange*)
- 20 New Cardiac Drugs**
 9-11 a.m.—Middlesex General Hospital
 (*Sponsored by Middlesex General Hospital and AAFP*)
- 20 Special Rounds, General Surgery and Specialties**
 10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
 (*Sponsored by St. Mary's Hospital*)
- 20 New Frontiers in Psychiatry**
 1-2:30 p.m.—N.J. Medical School, Newark
 (*Sponsored by CMDNJ and AMNJ*)

- 21 Insect Allergy**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 21 Carcinoma of Lung**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 21 Diagnostic Approaches to the Ischemic Lower Extremity**
5-6:30 p.m. — Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
- 21 Postgraduate Symposia in Surgery**
7:30-8:30 a.m. — West Jersey Hospital, Voorhees
(Sponsored by West Jersey Hospital, University of Pennsylvania and AAFP)
- 21 Elizabeth Tri-Hospital Hematology Conferences**
8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 21 No. N.J. Regional Chest Conference**
7:30-9:30 p.m. — Riverside General Hospital, Secaucus
(Sponsored by New Jersey Thoracic Society and NAMNJ)
- 26 Endotoxic Shock**
12 noon — Hospital Center at Orange
(Sponsored by AMNJ and AAFP)
- 26 Gastrointestinal Bleeding**
8 p.m. — Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
- 26 Surgical Treatment of Renal Vascular Hypertension**
8-10 p.m. — Englewood Mens' Club, Englewood
(Sponsored by The Englewood Surgical Society and AMNJ)
- 26 Hyperlipidemia**
12 noon — West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 26 Pathology Symposium**
Diagnostic Slide Session
10-11 a.m. — Middlesex General Hospital, New Brunswick
Enlarged Lymph Node, A Differential Diagnosis
4:30-5:30 p.m. — Rutgers Medical School, Piscataway
- 27 Variations on Hepatitis Theme**
1-2 p.m. — VA Hospital, Lyons
(Sponsored by VA Hospital, Lyons and CMDNJ)
- 27 Allergy**
3:15-4:45 p.m. — Fair Oaks Hospital, Summit
(Sponsored by Fair Oaks Hospital and AMNJ)
- 27 Analytical Psychiatrics**
- 1:30-3:30 p.m. — Christ Hospital, Jersey City
(Sponsored by Christ Hospital and AAFP)
- 27 Radiologic Problems for Family Physicians**
8-9 a.m. — So. Ocean County Hospital, Manahawkin
(Sponsored by Burlington County Memorial Hospital and AAFP)
- 27 Chemotherapy in Treatment of Breast Cancer**
12 noon-1 p.m. — Englewood Hospital, Englewood
(Sponsored by Englewood Hospital and AMNJ)
- 27 Emotional Crises in Practice**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 27 Special Rounds, Internal Medicine**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 27 Neonatal Infections**
10:30 a.m.-12 noon — Passaic General Hospital
(Hahnemann Medical College and AAFP)
- 27 Lung Cancer**
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 28 Pediatric Pulmonary Conference and Case Presentations**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 28 Use and Abuse of Diuretics**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 30 Parenting — From Cradle to College**
9:15-11:30 a.m. — William Paterson College, Wayne
(Sponsored by Passaic County Medical Society Women's Auxiliary and AMNJ)
- May**
- 2 Emergency Medicine**
8 p.m. — Community Memorial Hospital, Toms River
(Sponsored by AMNJ and AAFP)
- 2 A Learning-Disabled Adolescent**
8-10 p.m. — 1046 South Orange Avenue, Short Hills
(Sponsored by Essex Psychiatric Seminar and AMNJ)
- 2 Basic Science for Surgeons**
9 3-4 p.m. — Martland Hospital, Newark
(Sponsored by N.J. Medical School and AMNJ)
- 16**
- 23**
- 2 Pediatric Endocrinology**
6 1-5 p.m. — Somerset Hospital, Somerville
(Sponsored by Somerset Hospital and AMNJ)

- 3 **Community Medicine Lecture Series**
9:30 a.m.—Overlook Hospital, Summit
(Sponsored by Overlook Hospital and AAFP)
- 3 **Cerebral-Vascular Disease**
11 a.m.—Greystone Park Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
- 3 **Childhood Injuries**
5-6 p.m.—Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)
- 3 **Chronic Hepatidities**
10 8-9 a.m.—Paterson General Hospital
17 (Sponsored by Paterson General Hospital and AMNJ)
24
31
- 4 **Thanatology**
1 p.m.—Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)
- 4 **Sports Medicine**
11:30 a.m.—Rahway Hospital
(Sponsored by AMNJ and AAFP)
- 4 **Low Back Pain**
9-11 a.m.—Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 4 **Glomerulonephritis**
9:15-10:15 a.m.—St. Barnabas Medical Center, Livingston
(Sponsored by AMNJ and St. Barnabas Medical Center)
- 4 **Special Rounds, Pathology**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 4 **Psychiatric Rehabilitation**
1-2:30 p.m.—N.J. Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 4 **Allergy and Immunology**
11 7:30-8:30 a.m.—Alexian Brothers Hospital, Elizabeth
18 (Sponsored by Alexian Brothers Hospital and AAFP)
25
- 4 **Anatomy for Surgeons**
11 4 p.m.-9 p.m.—Rutgers Medical School, Piscataway
18 (Sponsored by CMDNJ and AMNJ)
25
- 4 **Cardiology Conferences**
18 4-6 p.m.—Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)
- 4 **Distinguished Lectures in Ob/Gyn**
8-9 p.m.—The Carriage Trade, East Orange
(Sponsored by CMDNJ and AMNJ)
- 4 **New Concepts and Review of Internal Medicine**
18 1-3 p.m.—Bayonne Hospital
(Sponsored by CMDNJ and AMNJ)
- 4 **Internal Medicine-1977**
8:30 a.m.-4:30 p.m.—Coachman Inn, Cranford
(Sponsored by AMNJ and AAFP)
- 4 **Continuing Medical Education Program**
11 10:30-11:30 a.m.—Clara Maass Memorial Hospital,
18 Belleville
25 (Sponsored by Clara Maass Mem. Hosp. and AAFP)
- 4 **Rahway Hospital Continuing Medical Education Program**
11
18 11:30 a.m.—Rahway Hospital, Rahway
25 (Sponsored by Rahway Hospital and AAFP)
- 4 **Grand Rounds in Obstetrics and Gynecology**
11 2-4 p.m.—New Jersey Medical School, Newark
18 (Sponsored by CMDNJ and AMNJ)
25
- 4 **Coronary Atherosclerosis, Recognition and Management**
9 a.m.-5 p.m.—Morristown Memorial Hospital, Morristown
(Sponsored by CMDNJ and AAFP)
- 5 **Medical Grand Rounds**
12 9-10 a.m.—St. Elizabeth Hospital, Elizabeth
19 (Sponsored by St. Elizabeth Hospital and AAFP)
26
- 5 **Fluid and Electrolyte Balance**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 5 **Seminar in Medical Humanism**
8:30-10 p.m.—Bergen Pines County Hospital, Paramus
(Sponsored by Bergen Pines County Hospital, Bergen County Medical Society and AMNJ)
- 5 **Veterinary Allergy**
11 a.m.-12 noon—United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 5 **Neurosurgical Conferences**
12 4-5 p.m.—VA Hospital, East Orange
19 (Sponsored by CMDNJ, VA Hospital, East Orange, and AMNJ)
26
- 5 **Elizabeth Tri-Hospital Hematology Conferences**
19 8-9 a.m.—St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 5 **Basic Sciences and Clinical Applications**
12 3:30 p.m.—Burlington County Memorial Hospital, Mount Holly
19 (Sponsored by Burlington County Memorial Hospital and AAFP)
- 5 **Advanced Psychiatric Study Group**
8-10 p.m.—312 Harding Drive, South Orange
(Sponsored by Group for Advanced Psychiatric Study and AMNJ)
- 5 **Southern New Jersey Regional Chest Conference**
7:30-9:30 p.m.—John F. Kennedy Hospital, Stratford
(Sponsored by New Jersey Thoracic Society and AMNJ)

- 5 **Central New Jersey Regional Chest Conference**
4-6 p.m.—Rutgers Medical School, Piscataway
(Sponsored by New Jersey Thoracic Society and AMNJ)
- 6 **Cardiology Conferences**
- 13 7:30-8:30 a.m.—St. Elizabeth Hospital, Elizabeth
- 20 (Sponsored by St. Elizabeth Hospital and AAFP)
- 27
- 6 **Proper Use of Blood Gases**
8:30 a.m.—United Hospitals of Newark
(Sponsored by AMNJ and AAFP)
- 6 **White Cell Disorders**
10 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 6 **Use of Newer Isotopes**
12 noon-1 p.m.—St. Mary's Hospital, Orange
(Sponsored by St. Mary's Hospital and AMNJ)
- 7 **Advances in Orthopedic Surgery**
- 14 8:30-10:30 a.m.—N.J. Medical School, Newark
- 21 10 a.m.-12 noon—(Third Saturday Only)
- 28 (Sponsored by CMDNJ and AMNJ)
- 10 **Genetics**
12 noon—West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 10 **Leukemia**
8 p.m.—Paul Kimball Hospital, Lakewood
(Sponsored by AMNJ and AAFP)
- 10 **Plastic Surgery**
9 p.m.—Bayonne Hospital
(Sponsored by AMNJ and AAFP)
- 10 **What's New in Allergy?**
12 noon—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 10 **Artificial Insemination**
8-10 p.m.—391 White Oak Ridge Road, Short Hills
(Sponsored by Journal Club of Greater Newark and AMNJ)
- 11 **Academy of Medicine Annual Awards Dinner**
6 p.m.—Chanticleer, Millburn
- 11 **Thanatology**
1:30 p.m.—Runnells Hospital, Berkeley Heights
(Sponsored by AMNJ and AAFP)
- 11 **Obstructive Lung Disease**
1:30-3 p.m.—St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 11 **Sputum Examination**
11:30 a.m.-12:30 p.m.—V.A. Hospital, East Orange
(Sponsored by East Orange V.A. Hospital)
- 11 **Patient with Advanced Cancer**
9-11 a.m.—Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 11 **Special Rounds, Pediatrics**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 11 **Role of the Therapist in Psychotherapy**
- 18 1-2:30 p.m.—Marlboro Psychiatric Hospital
(Sponsored by Marlboro Psychiatric Hospital and AMNJ)
- 11 **Clinical Shock**
10:30-12 noon—Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
- 11 **Sex Therapy**
- 25 **Psychiatric Differential Diagnosis**
1:30-3:30 p.m.—Christ Hospital, Jersey City
(Sponsored by Christ Hospital and AAFP)
- 12 **Therapeutic Determinants in Treatment of Alcoholism**
8-9 p.m.—Mount Holly Center, 62 Richmond Ave., Mount Holly
(Sponsored by Burlington County Medical Society, AMNJ and AAFP)
- 12 **Marital Counseling and Gender Identity**
11 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 12 **Elizabeth Tri-Hospital Endocrine Conferences**
- 26 8-9 a.m.—St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 12 **Management of Diabetes**
- 26 **Hyperalimentation**
10:30 a.m.—Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 12 **Urticaria and Angioedema**
11 a.m.-12 noon—United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 12 **Immunology and Asthma**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 12 **Second Annual Neurology Symposium in Cerebrovascular Diseases**
8:30 a.m.-4 p.m.—Englewood Hosp., Englewood
(Sponsored by Englewood Hospital and AAFP)
- 13 **Recent Advances in Pediatric Cardiac Surgery**
7:30-10 p.m.—Mayfair Farms, West Orange
(N.J. Society of Thoracic Surgeons and AMNJ)
- 14- **MSNJ Annual Meeting**
- 17 Haddon Hall, Atlantic City

- 15 Scientific Session – Section on Family Practice**
16 9 a.m.-4 p.m. – Haddon Hall, Atlantic City
(Sponsored by MSNJ and N.J. Academy of Family Physicians)
- 16** **Diagnosis and Management of Non-Hodgkins Lymphoma**
 12 noon-1 p.m. – Overlook Hospital, Summit
(Sponsored by Overlook Hospital and AMNJ)
- 17** **Tuberculosis**
 12 noon – St. Mary's Hospital, Orange
(Sponsored by AMNJ and AAFP)
- 18** **Common Medical Problems**
25 **Common Radiologic Problems for Family Physicians**
 8-9 a.m. – So. Ocean County Hospital, Manahawkin
(Sponsored by Burlington County Memorial Hospital and AAFP)
- 18** **What's New in Office Gynecology?**
 9-11 a.m. – Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 18** **Special Rounds, General Surgery and Specialties**
 10:30 a.m.-12 noon – St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 18** **Pharmacology of Sleep**
 1-2:30 p.m. – N.J. Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 18** **Rational Dosage of Neuroleptics**
 3:15-4:45 p.m. – Fair Oaks Hospital, Summit
(Sponsored by Fair Oaks Hospital and AMNJ)
- 18** **Disorders of Sleep/Wakefulness States**
 New Jersey Medical School, Newark
(Sponsored by CMDNJ and AAFP)
- 19** **Atopic Dermatitis**
 11 a.m.-12 noon – United Hospitals of Newark
(Children's Hospital of Newark and CMDNJ)
- 19** **Outpatient Management of Pulmonary Tuberculosis**
 11:45 a.m.-12:45 p.m. – Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 19** **Cellular Engineering in Medicine**
 5-6:30 p.m. – Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
- 19** **Postgraduate Symposia in Surgery**
 7:30-8:30 a.m. – West Jersey Hospital, Voorhees
(Sponsored by West Jersey Hospital, University of Pennsylvania and AAFP)
- 19** **Marriage: Myth and Reality**
 8:30-10:30 p.m. – Hackensack Hospital
(Sponsored by N.J. Psychoanalytic Society and AMNJ)
- 20** **Diabetes**
 12 noon – Freehold Area Hospital
(Sponsored by AMNJ and AAFP)
- 20** **Duodenal-Pancreatic Catheterization**
 9-10 a.m. – St. Francis Hospital, Trenton
(Sponsored by Hahnemann Medical College and AAFP)
- 24** **Thanatology**
 12 noon – Hospital Center at Orange
(Sponsored by AMNJ and AAFP)
- 24** **Obesity, Prevention and Control**
 12 noon – West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 24** **Secretory Immunoglobulins in Diagnosis of GI Carcinoma**
 8-10 p.m. – Englewood Mens' Club
(Sponsored by the Englewood Surgical Society)
- 24** **Bleeding Diseases**
 8 p.m. – Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
- 25** **Proper Use of Blood Gases**
 1:30-3 p.m. – St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 25** **Headache**
 9-11 a.m. – Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 25** **Special Rounds, Internal Medicine**
 10:30 a.m.-12 noon – St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 25** **Pneumonia: Viral and Bacterial**
 10:30-12 noon – Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
- 25** **Behavioral Therapy and Psychopharmacology**
 3:15-4:45 – Fair Oaks Hospital, Summit
(Sponsored by Fair Oaks Hospital and AMNJ)
- 26** **Human Territoriality**
 12 noon – Carrier Clinic, Belle Mead
(Sponsored by Carrier Clinic)
- 26** **Pediatric Pulmonary Conference and Case Presentations**
 11 a.m.-12 noon – United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 26** **Preventive Measures in Heart Disease**
 11:45 a.m.-12:45 p.m. – Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- June**
- 1** **Tuberculosis—Outpatient Treatment**
 1 p.m. – Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)

- 1 **Special Rounds, Pathology**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 1 **Anatomy for Surgeons**
4-9 p.m.—Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)
- 1 **Allergy and Immunology**
8 7:30-8:30 a.m.—Alexian Brothers Hospital, Elizabeth
15 (Sponsored by Alexian Brothers Hospital and AAFP)
22
- 1 **Distinguished Lectures in Ob/Gyn**
8-9 p.m.—The Carriage Trade, East Orange
(Sponsored by CMDNJ and AMNJ)
- 1 **Continuing Medical Education Series**
10:30-11:30 a.m.—Clara Maass Memorial Hospital,
Belleville
(Sponsored by Clara Maass Mem. Hosp. and AAFP)
- 1 **Continuing Medical Education Program**
8 11:30 a.m.—Rahway Hospital, Rahway
15 (Sponsored by Rahway Hospital and AAFP)
- 2
- 9 **Medical Grand Rounds**
16 9-10 a.m.—St. Elizabeth Hospital, Elizabeth
23 (Sponsored by St. Elizabeth Hospital and AAFP)
30
- 2 **Advanced Psychiatric Study Group**
8-10 p.m.—312 Harding Drive, South Orange
(Sponsored by Group for Advanced Psychiatric Study
and AMNJ)
- 2 **Elizabeth Tri-Hospital Hematology Conferences**
16 8-9 a.m.—St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 2 **Neurosurgical Conferences**
9 4-5 p.m.—VA Hospital, East Orange
16 (Sponsored by CMDNJ, VA Hospital, East Orange,
23 and AMNJ)
30
- 2 **Pulmonary Function Tests**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center,
Edison
(Sponsored by Kennedy Medical Center)
- 2 **So. N.J. Regional Chest Conference**
7:30-9:30 p.m.—John F. Kennedy Hospital, Stratford
(Sponsored by New Jersey Thoracic Society and
AMNJ)
- 2 **Central N.J. Regional Chest Conference**
4-6 p.m.—Rutgers Medical School, Piscataway
(Sponsored by New Jersey Thoracic Society and
AMNJ)
- 3 **Psychiatry-Medical Surgical Emergencies**
8 30 a.m.—United Hospitals of Newark
(Sponsored by AMNJ and AAFP)
- 3 **Cardiology Conferences**
10 7:30-8:30 a.m.—St. Elizabeth Hospital, Elizabeth
17 (Sponsored by St. Elizabeth Hospital and AAFP)
24
- 4 **Advances in Orthopedic Surgery**
11 8:30-10:30 a.m.—N.J. Medical School, Newark
18 10 a.m.-12 noon—(Third Saturday Only)
25 (Sponsored by CMDNJ and AMNJ)
- 6 **Non-Specific Urethritis**
8 p.m.—Community Memorial Hospital, Toms River
(Sponsored by AMNJ and AAFP)
- 6 **An Enuretic Girl**
8-10 p.m.—9 Marquette Road, Upper Montclair
(Sponsored by Essex Psychiatry Seminar and AMNJ)
- 7 **Chronic Hepatidities**
14 8-9 a.m. Paterson General Hospital
(Sponsored by Paterson General Hospital and AMNJ)
- 7 **Biology of Surgical Infection**
5-6 p.m.—Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)
- 7 **Arthritis**
11 a.m.—Greystone Park Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
- 8 **Special Rounds, Pediatrics**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 8 **Understanding Psychiatric Problems**
3:15-4:45 p.m.—Fair Oaks Hospital, Summit
(Sponsored by Fair Oaks Hospital and AMNJ)
- 8 **Endotoxic Shock**
1:30-3 p.m.—St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 8 **Management of Arrhythmias**
10:30-12 noon—Passaic General Hospital
(Hahnemann Medical College and AAFP)
- 8 **Annual Meeting New Jersey Thoracic Society**
Rutgers Medical School, Piscataway
(Sponsored by New Jersey Thoracic Society)
- 8 **Hyperkinetic Syndrome of Childhood**
15 **Modern Aspect of Drug Abuse**
22 **Psychopharmacology and Psychiatric Disorders**
29 **Forensic Psychiatry**
1:30-3:30 p.m.—Christ Hospital, Jersey City
(Sponsored by Christ Hospital and AAFP)
- 8 **Evolution of the State Hospital Psychiatrist**
1-2:30 p.m.—Marlboro Psychiatric Hospital
(Sponsored by Marlboro Psychiatric Hospital and
AMNJ)
- 9 **Proper Use of Blood Gas**
11:45 a.m.-12:45 p.m.—Kennedy Medical Center,
Edison
(Sponsored by Kennedy Medical Center)

- 9 Elizabeth Tri-Hospital Endocrine Conferences**
23 8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 14 Chronic Pancreatic Disease**
 12 noon — West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 14 Endocrine Changes in Menopause**
 11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 14 Pacemakers**
 8 p.m. — Paul Kimball Hospital, Lakewood
(Sponsored by AMNJ and AAFP)
- 14 Allergy**
 9 p.m. — Bayonne Hospital
(Sponsored by AMNJ and AAFP)
- 15 Adult Respiratory Distress Syndrome**
 11:30 a.m.-12:30 p.m. — V.A. Hospital, East Orange
(Sponsored by East Orange V.A. Hospital)
- 15 Special Rounds, General Surgery and Specialties**
 10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 15 Transcultural Psychiatry**
 1-2:30 p.m. — New Jersey Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 15 Common Medical Problems**
- 22 Radiologic Problems for Family Physicians**
 8-9 a.m. — So. Ocean County Hospital, Manahawkin
(Sponsored by Burlington County Memorial Hospital and AAFP)
- 16 Postgraduate Symposia in Surgery**
 7:30-8:30 a.m. — West Jersey Hospital, Voorhees
(Sponsored by West Jersey Hospital, University of Pennsylvania and AAFP)
- 16 Duodenal Ulcer Disease**
 11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 16 Current Concepts of Addiction**
 5-6:30 p.m. — Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
- 17 Thyroid Diseases**
 12 noon — Freehold Area Hospital
(Sponsored by AMNJ and AAFP)
- 20 Status Asthmaticus**
 10 a.m. — Monmouth Medical Center
(Sponsored by AMNJ and AAFP)
- 21 Hypertension**
 12 noon — St. Mary's Hospital, Orange
(Sponsored by AMNJ and AAFP)
- 22 Arterial Blood Gases**
 10:30-12 noon — Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
- 22 Hemorrhagic Shock**
 1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
- 22 Special Rounds, Internal Medicine**
 10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 23 Psychosomia — A Medical Diagnosis**
 11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 28 Outpatient Management of Tuberculosis**
 8 p.m. — Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
- 28 Treatment of Rheumatoid Arthritis**
 12 noon — West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 28 Dysentery in India**
 8-10 p.m. — Englewood Mens' Club, Englewood
(Sponsored by Englewood Surgical Society and AMNJ)

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Villous Adenomas

J. V. Lott, M.D., et al.

Permanent Contraception

*R. J. DiBenedetto, M.D.,
et al.*

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* **WRITE FOR REPRINT:** R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahoglu, M.D. "Hormones for Improved Sexuality in the Male and Female Climacteric." *Drug Therapy*, Sept. 1976.

Is there a true aphrodisiac? How effective are androgens in the management of the male climacteric and male impotence? Article discusses the psychophysiological and hormonal changes in the elderly male and female and therapeutic considerations. The effectiveness of methyltestosterone in the management of male impotence was confirmed by a cross-over, double-blind study using a placebo and Android-25

(methyltestosterone 25 mg.), on 20 males, 50 years of age or older who complained of secondary impotence. Patients received a series of placebo then Android-25, or Android-25 then placebo as follows: 1 tablet/30 days; 2 tablets/30 days; 3 tablets/30 days. Sexual response was evaluated: 0 = no change; + = 25% improvement; ++ = 50% improvement; +++ = 75% improvement. Placebo effectiveness was + or ++ in 12.7% of trials. Android-25 elicited a -, ++ or +++ response in 47.2% of trials. There was often a dose related response not observed with the placebo. This effect was not observed in younger patients (age 28-45 years).

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avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE**

REACTIONS: Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg. Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpubertal cryptorchidism, 30 mg. **REFERENCE:** Robert B. Greenblatt, M.D., and D. H. Perez, M.D.: "The Menopausal Syndrome," *Problems of Libido in the Elderly*, pp. 95-101. Medcom Press, N.Y., 1974. **HOW SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

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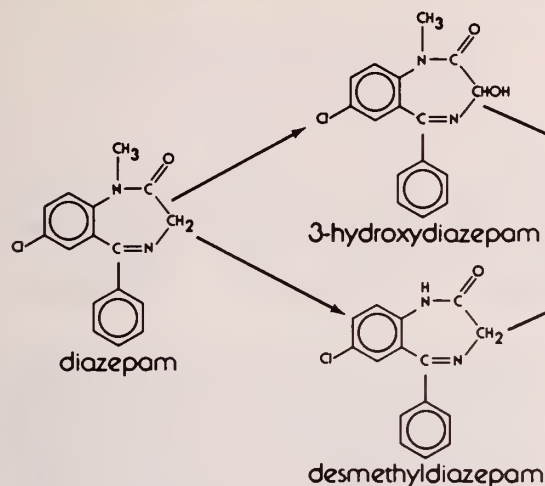
MEETINGS OF MEDICAL INTEREST

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Warnings: Not of value in psychotic patients.

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Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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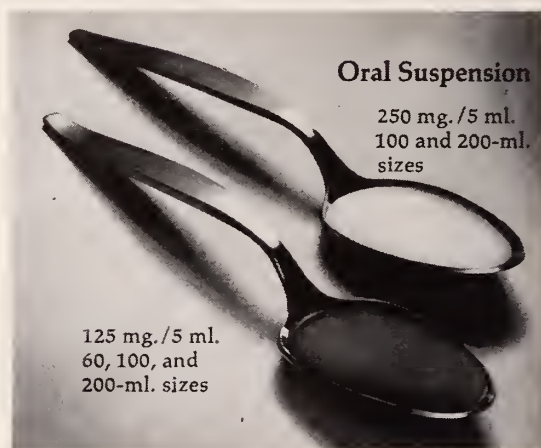
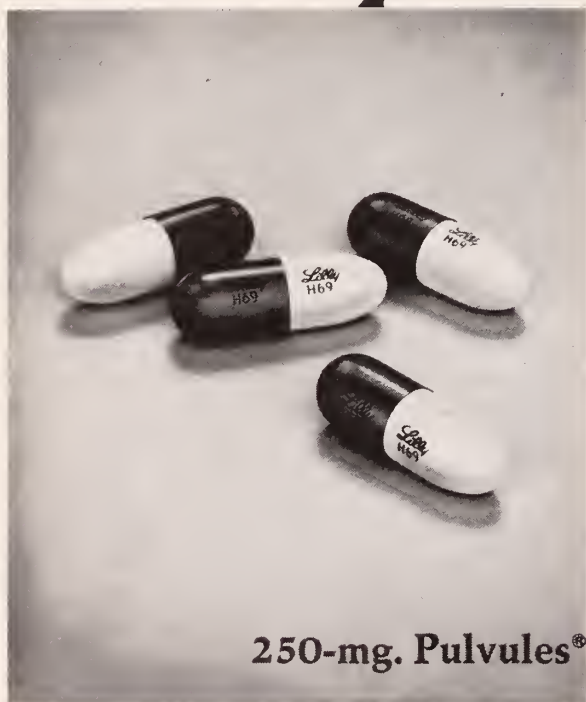
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EDITORIALS

Hospital Rate Setting

While the State Department of Health experiments with a system of payment to New Jersey's hospitals for rendering care to its citizens, those with the greatest need but the least purchasing power—the uninsured medically indigent—are likely to be excluded from all but emergency or crisis care. This short-sighted fiscal policy, based on inherently unfair and unsound concepts, is supposed to relieve the economic crunch on urban hospitals. According to the State's Commissioner of Health, "Relieving the financial pressure on these (urban) hospitals is one of the great needs in New Jersey." This is the type of bureaucratic euphemism which boggles the mind.

Like any business, a hospital's solvency depends upon its cash flow, i.e., the relationship between income and expenditures. This is a fairly clear-cut tie-in for non-profit hospitals and one which lends itself to public and actuarial scrutiny. The amount of services rendered is an intrinsic element of the "bottom line." Hospitals have clearly defined origins of income—Blue Cross, Medicaid, Medicare, and commercial carriers, with a trivial amount from self-paying patients and gifts. The final monetary wells—the county boards of chosen freeholders and municipal government—have been directed toward the concept of appropriations to support the losses due to care of the medically indigent.

If one looks at the fiscal experience in a single county—Mercer—one can gain a concept of the pathogenesis of the monetary disorder and some notion as to therapy. In 1976, the five general hospitals in Mercer County provided care to the medically indigent citizens at a cost of \$2,445,000, only \$670,000 (27.4%) of which was paid for by the Mercer County Board of Chosen Freeholders. In one of the hospitals, the final per diem rate for that year for Blue Cross reimbursement, as set by the State of New Jersey, appears to be about \$6 *less than actual cost*. The same applies to Medicaid re-

imbursement, but not with Medicare, which pays actual costs. Commercial carriers pay "charges," which means a positive cash flow, rather than a break-even or negative situation.

Projections for 1977 in this county appear even more bleak with projected losses approaching \$3 million, based on an actual reduction in the estimated county appropriation.

What is the reason for this gloomy picture, which threatens to bankrupt all of the community hospitals in our State? It seems quite clear that the "buck" keeps moving from federal to state to county to municipal hands, but never seems to stop. Inflation, new technology, and scientific advances, salary adjustments, and all the ordinary costs of rendering care—food, drugs, linens, and so on—punish the hospital budgets while the income sources, in an arbitrary and illogical way, fail to meet their responsibilities.

New Jersey has a rate-setting mechanism housed in the Health Care Facilities Act, which empowers the Commissioner of Health to set rates of hospital reimbursement by Blue Cross and Medicaid and to review hospital budgets. To date, the experience has been punitive with allowable rates less than actual costs. The avowed purpose is to contain the costs of providing hospital inpatient and outpatient care. Has it worked thus far?

A study* commissioned by the Federation of American Hospitals examined hospital expenditures and revenues in 18 states on both a per case and a per capita basis for the period 1967-1975. The study looked at states that had mandatory or voluntary rate regulations or no regulations at all and showed that rate-setting programs have little or no effect on rising costs. In fact, a specific comparison between New Jersey and Illinois, two demographically similar states, showed comparable rates despite the fact that New Jersey has a mandatory rate-setting program and Illinois has no regulation program at all! The matter is complex—and becoming more so. It now appears that the

*Rucci NJ: "Health Care Letter," Laventhol and Horwath, January 1977.

great New Jersey rate-setting experiment, which will shift from per diem to reimbursement based on diagnostic groups, is being scrutinized by the U.S. Department of HEW. Can you imagine two hospitals each with a patient admitted for treatment of headache? One has a CAT scanner, an ultrasonographic laboratory, angiographic capabilities, electroencephalography, and sophisticated sources of consultation with neurologists and neurosurgeons. The other has little or none of these scientific advances, yet each has a patient in the same diagnostic category—headache! It's enough to give the reader (and the author) of this editorial a headache.

Is there an answer to the complex nature of this question? The short-term answers would include:

1. Payment of hospitals through Blue Cross and Medicaid at actual costs—as Medicare is supposed to do.
2. Fiscal responsibility by federal, state, county, and municipal government to pay *full costs* for the medically indigent.

It is unfair to expect commercial carriers to pick up even one dollar of the losses of hospital care due to underpayment by Blue Cross and Medicaid and inadequate appropriations for the medically indigent.

The alternatives—which are unthinkable—are the closing down of bankrupt hospitals in urban settings or refusal to provide services to the medically indigent. If some relief is not forth-

coming either or both of these endpoints is inevitable.

What this State needs is a leader, with the courage of a "give-'em-hell" Harry Truman whose famous words, "the buck stops here," should prevail. It is government's responsibility to see that poor people get health care, but government cannot expect hospitals or commercial carriers to pay the bill for that care.

A.K.

Kudos to Sandoz

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Use in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider pharmacologic effects of agents, particularly potentiating drugs such as MAO inhibitors and

phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

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ORIGINAL ARTICLES

Three cases of spontaneous intraperitoneal perforation of the urinary bladder are reported. In the first case, spontaneous rupture of the bladder was secondary to necrotizing cystitis. In the second case, there was no evidence of a predisposing factor and in the third case, "neurogenic bladder" was the predisposing factor. The need to consider the possibility of this entity in patients with "acute abdomen" and hematuria is stressed. Early surgical intervention with closure of the perforation and drainage of the vesical and perivesical areas are recommended. The pertinent literature is reviewed.

Spontaneous Rupture of the Urinary Bladder*

**Mansoor Karamooz, M.D. and
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Rupture of the urinary bladder which is not associated with instrumentation or external trauma is called "spontaneous rupture." It is quite rare and in the majority of instances a primary bladder-wall inflammatory disease or outlet obstruction has been obvious and a long-standing precursor to the acute episode.

In the past ten years, three cases of "spontaneous bladder rupture" have been observed at the affiliated hospitals of the Urology Division of the New Jersey Medical School.

In the first patient, spontaneous rupture of the bladder was secondary to necrotizing cystitis. In the second there was no evidence of a predisposing factor, while "neurogenic bladder" was the predisposing factor in the third patient.

Case 1—A 52-year-old woman was admitted to the hospital in March 1964, with gross, painless hematuria of 12 hours' duration and lower abdominal pain of three hours' duration. On physical examination, the blood pressure was 160/90, the temperature was 100.2 degrees F., and the pulse was 80. There was lower abdominal tenderness and a distended bladder. The abdomen was soft with no rebound tenderness. The bowel sounds were hypoactive. The pelvic examination was negative.

An EKG and chest x-ray were normal. A Foley catheter was inserted in the bladder and 1500-cc. of bloody urine was obtained. A cystogram showed intraperitoneal extravasation of dye.

The patient's general condition and vital signs remained stable, so she was treated conservatively. Eleven days after admission, a cystogram showed no extravasation. A bladder

biopsy through cystoscopy showed "necrotizing cystitis." Catheter drainage was continued for three weeks and the patient was discharged after one month of hospitalization. Nine days after discharge, the patient was readmitted with gross hematuria and difficulty in voiding. Vital signs were normal. The abdomen was soft, with normal bowel sounds. Catheterization resulted in 730-cc. of bloody urine. A cystogram showed intraperitoneal extravasation of dye. She responded to conservative treatment and was discharged after 20 days.

One year later, the patient was readmitted with gross hematuria and inability to void. A cystogram showed intraperitoneal extravasation of dye because of bladder rupture. This time a laparotomy was performed on the same day. The peritoneal cavity contained about 1000-cc. of urine. A perforation was seen on the right side of the bladder dome. The bladder wall around the perforation was excised and the bladder was repaired in layers. The pathology report showed chronic cystitis. The post-operative course was uneventful and follow-up showed no recurrence.

Case 2—A 38-year-old woman was admitted in April 1967, with lower abdominal pain, oliguria and hematuria of two days' duration. There was no past history of trauma, instrumentation, or any urinary symptoms. On physical examination, the vital signs were normal. Tenderness and guarding over the suprapubic region were appreciated. The bladder was not palpable but on pressure over the region, the patient sensed a desire to urinate. A #20 Fr. Foley catheter was introduced without difficulty and 300-cc. of bloody urine and a few blood clots were drained.

Studies revealed a normal blood count, EKG, and chest x-ray but the urine contained many RBC's. An IVP showed a normal collecting system with a poorly visualized bladder, but the cystogram was normal. Cystoscopy showed a solid, sessile mass on the bladder dome with a diameter of 2.5 x 2.5 cm. It was covered with yellowish hemorrhagic exudates. A biopsy was taken which showed adipose tissue. Laparotomy was performed two days later and revealed a

*This study is from Martland Hospital, New Jersey Medical School-CMDNJ, Newark, where Dr. Karamooz is a Resident in Urology in the Department of Surgery and Dr. Seebode is Professor and Chief of the Division of Urology in the Department of Surgery.

plug of omentum protruding into the bladder through a perforation on the bladder dome. This was the mass inside the bladder seen by cystoscopy. The omental plug was dislodged and removed. The margin of bladder perforation was excised to obtain fresh edges and was sutured in layers. The postoperative course was uneventful.

Case 3—A 41-year-old man was hospitalized in July 1973, with acute abdominal pain and vomiting for two days. He was known to have multiple sclerosis for 13 years. He wore an external urinary catheter because of lower extremity weakness and confinement to a wheel chair although he could void with a good stream and control. He denied any urologic problems prior to this episode and had not been instrumented prior to admission.

On admission, the patient was apprehensive and pale with a blood pressure of 90/70 and pulse of 140. Abdominal distension, diffuse rigidity and tenderness were noted mainly in the epigastrium and right lower quadrant; bowel sounds were absent. The urine was bloody. The white blood count was 25,000 with 84 percent polys; EKG and chest x-ray were normal. X-ray of the abdomen showed air under the diaphragm with a scattered gas pattern in the bowel. A nasogastric tube was passed and drained bloody secretions, while 200-cc. of bloody urine was removed by a Foley catheter.

An emergency laparotomy showed generalized peritonitis with turbid odorless fluid in the peritoneal cavity and a 3 cm. oval perforation in the dome of the bladder. The edges of the perforation were excised and the bladder was repaired in layers. The pathology report revealed "acute necrotizing cystitis." On the tenth postoperative day, the patient bled from a stress gastric ulcer which necessitated vagotomy and pyloroplasty. A febrile course followed this procedure. Enterococci and pseudomonas were cultured from the urine, so gentamycin and ampicillin were administered. An indwelling catheter was left *in situ* and the patient responded well. He was discharged after two months.

Discussion

The first recorded cases of spontaneous rupture of the bladder were as long ago as 1279 by Pierus.²¹ Stone in 1931 reviewed 40 cases and added two of his own.²¹ He stressed the importance of chronic or acute urinary obstruction and also of destructive lesions of the bladder as etiological factors.

Lipow and Vogal reported an incidence of one in 12,510 admissions.¹⁴ Polzak reported one case in 56,743 hospital admissions.¹¹

Spontaneous rupture of the bladder is almost invariably associated with a predisposing factor as shown by a review of 67 cases by Bastable:³

<i>I. Bladder Lesions</i>	<i>No. of Cases</i>
Tuberculosis	9
Cystitis	6
Scars	6

Carcinoma	5
Cystitis and diverticula	1
Lipomatosis	1
Total	28

II. Retention

1. Urethral obstruction:	
Enlarged prostate	8
Stricture	5
Impacted gravid uterus	2
Impacted fibroids with cystitis	1
Stricture (diverticula)	1
Obstructed labor	1
Total	18

2. Neurological disorders:	
Tabes dorsalis	3
Paraplegia with cystitis	1
Total	4

3. Miscellaneous	
Alcoholics	5
Associated with pregnancy (labor and postpartum)	4
Idiopathic	4
Postoperative	1
Chronically ill	1
Coughing	1
Retching	1
Total	17
Grant Total	67

The Miscellaneous Group

The cases in this group comprise those in which there was neither a lesion of the bladder wall, a neurological disorder, nor mechanical obstruction of the urethra. All five of the alcoholic patients had a previous history of consuming alcohol prior to the rupture; none was unconscious and there was no history of trauma. One patient noticed abdominal distension and was unable to pass urine; one hour later, he "felt something burst," complained of abdominal pain, and voided bloody urine. This appears to be a case of rupture following acute retention. Feigal and Polzak suggested that alcohol, by dulling the sensation, delays the urge to void and tends to produce overdistension.¹¹ Overdistension of the bladder from other causes may also be a predisposing factor. Drugs used in the treatment of urinary retention may lead to bladder rupture; and McAlister¹⁵ reported such a case with the use of carbachol.

Spontaneous Bladder Rupture

It has been thought that spontaneous rupture of the bladder may be precipitated by increased

abdominal pressure, straining at stool or during micturition or labor. Cave⁵ reported an instance which occurred during the third month of pregnancy.

Recurrent spontaneous rupture of the bladder is a rare phenomenon. Crast³ reviewed four cases in males in whom the rupture was intraperitoneal.

Bastable and Jode⁶ reviewed 66 cases from world literature and added six cases of their own which are compared with those reviewed by Stone²¹ (1931) for analysis and discussion.

There were 66 cases of intraperitoneal rupture, five cases of extraperitoneal rupture and one mixed.

	<i>Intra-peritoneal</i>	<i>Extra-peritoneal</i>	<i>Mixed</i>
Stone—1200-1899	13	6	
1899-1931	11	7	
Bastable—1959	66	5	1

The five cases of extraperitoneal rupture all occurred in men. Of the 66 cases of intraperitoneal rupture, 14 occurred in women. The youngest patient was 21 years old.

The site of rupture is usually the dome of the bladder, which is the weakest portion of the bladder wall, covered only by peritoneum. The remainder of the bladder is not covered by peritoneum, but is well protected by fascial coverings and the pelvic bones.

It is important to consider bladder perforation in the differential diagnosis of the acute abdomen, whenever the cause is obscure or when prior urinary tract symptomatology can be elicited. The usual history is sudden onset of lower abdominal pain which often starts during the act of micturition. The patients may be unable to empty the bladder completely. Frequently, the urine is bloodstained. Intraperitoneal rupture must be considered where hematuria and signs of peritoneal irritation are present.

The possibility of spontaneous rupture of the bladder always should be considered where there is no history of injury. Although spontaneous rupture appears to be a rare condition,

the true incidence may be greater than that reported. Spontaneous rupture as a terminal event in cases of tuberculosis and carcinoma may not be diagnosed. Bacon² mentioned four cases of spontaneous rupture due to carcinoma, but gave no details. A small perforation may not be seen at operation and the case may be misdiagnosed as peritonitis of uncertain origin. Such cases have been described at autopsy after a careful examination of the bladder was made.

Spontaneous rupture following undiagnosed reflex retention or due to injudicious administration of parasymphathomimetic drugs may not be reported.

The condition is serious with a mortality rate of up to 47 percent.^{4,25} Errors in diagnosis are common with the usual diagnosis being peritonitis secondary to a perforated peptic ulcer.²⁵

The correct management of spontaneous rupture of the urinary bladder consists of laparotomy repair of the bladder in two layers after excising the margins to obtain fresh edges, peritoneal toilet, adequate bladder drainage by means of urethral catheterization, drainage of the extravasation, and antibiotic therapy. Our first patient was treated conservatively with spontaneous healing of the perforation on two occasions. On the third occasion, the perforation was treated surgically. We prefer surgical treatment because it affords removal of the diseased margins of the perforation, thus resulting in sound healing of the sutured edges. It also allows a histologic diagnosis especially in cases in which localized bladder lesions are the cause of spontaneous rupture.

Summary

Three cases of spontaneous intraperitoneal rupture of the bladder are presented. One had three episodes of spontaneous rupture. Another patient had no predisposing factor and the perforation was sealed off with a plug of omentum. The third patient had necrotizing cystitis as a predisposing factor for spontaneous rupture. The 66 cases of intraperitoneal rupture, five cases of extraperitoneal rupture, and one case of combined rupture from the literature were reviewed. Intraperitoneal rupture is classified into

two main groups according to whether there was a lesion of the bladder wall or whether the rupture was secondary to retention. The retention group is associated with neurological disorders, urinary obstruction, or reflex retention. Diagnosis depends on a history of pain, disturbances of micturition with hematuria, and the signs of peritonitis. Early surgical intervention with drainage of the peritoneal cavity and suturing of the bladder perforation is recommended.

The reported mortality rate was 47 percent in 1959⁴ but it should be lower with early diagnosis and appropriate treatment. The high mortality rate in cases of unrecognized or spontaneous bladder rupture emphasizes the need to consider vesical perforation in any instance of an acute abdomen when the cause is not immediately apparent and micturition disturbances have been present.

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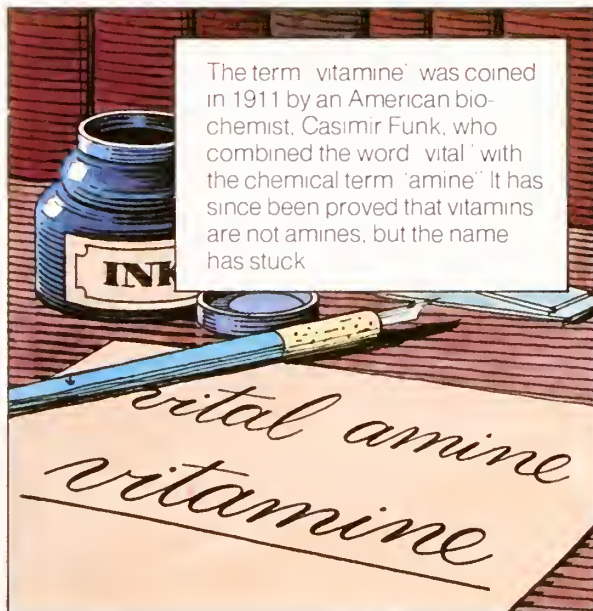
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The second mediastinal thymic cyst ever reported following cardiac surgery was seen at the Deborah Heart and Lung Center six years after valvular surgery in a 44-year-old man. It is the first such case in an adult. Surgery may play a role in developing mediastinal thymic cysts whose clinicopathologic features are here summarized.

Thymic Cysts of the Mediastinum*

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Browns Mills

In 1970, Krongrad and associates¹ described the appearance of a mediastinal thymic cyst two years following open aortic valvulotomy to relieve congenital aortic stenosis in a 13-year-old boy. It was the first time a thymic cyst was ever reported following open heart surgery. The second such case was reported in a recent article.² The mediastinal thymic cyst in that last case developed 6 years after mitral and aortic valve surgery in a 44-year-old male. Despite the rarity of such an observation, a possible role of previous surgery in the formation of thymic cyst is implied. (Figures 1 and 2)



Figure 1 — The chest x-ray reveals a lobulated mass in the right hilum with no calcification.



Figure 2 — After operation, follow-up chest x-ray shows the disappearance of the wide mediastinal shadow.

This article reviews the evolution, pathologic features, and clinical and roentgenologic features of all the mediastinal thymic cysts collected from the literature.

Loupalt³ in 1897 recorded the first congenital mediastinal thymic cyst which was found at necropsy in an 18-year-old girl. The first American report, published by Spees⁴ in 1938, described a necropsy finding of thymic cyst in a 25-year-old man. Although such lesions have been recognized for a long time, they are rare

*This review is from the Department of Cardiothoracic Surgery, Deborah Heart and Lung Center, Browns Mills, New Jersey where Dr. Cuasay is attending cardiothoracic surgeon.

and represent approximately one percent of all mediastinal masses.^{5,6}

Review of the literature disclosed only 48 cases of congenital thymic cysts reported through 1964. Of these, 32 were situated within the anterior mediastinum, while the remainder were located in the neck or were combined cervical-mediastinal cysts.

Since that time, 23 more cases of exclusively mediastinal thymic cysts have been reported.^{1,2,7,8,9,10} Of the 55 cases collected from the literature, only two were seen following open heart surgery.^{1,2}

Thymic cysts have been classified as neoplastic, congenital, and inflammatory.⁶ The neoplastic variety is more properly called a thymoma with cystic degeneration. Those of infectious origin were usually found in luetic infants and were termed Dubois abscesses. Initially attributed to tuberculosis and later to syphilis, the cysts are now generally regarded to be of congenital origin, as first proposed by Westenryk in 1900.¹¹

Thymic tissue comes from a remnant of the ventral aspect of the third lateral pharyngeal pouch (branchial cleft in the six-week embryo).¹² This structure is initially hollow but solid epithelial bars soon appear within it and unite inferiorly. The lower ends of these bars become attached to the pericardium and descend with it into the chest. During descent, the upper ends of the epithelial bars became drawn out and disappear. Arrest at any stage of this descent causes thymic tissue to be found anywhere in the neck, in or near the midline, down to the diaphragm.

It has been hypothesized^{4,5,11} that a patent thymic or thymo-pharyngeal duct persists in the true congenital defect. When fluid accumulates or hemorrhage occurs, distention and a cyst follow, but the cause of the fluid or hemorrhagic distention remains unknown. This developmental theory of origin of thymic cyst is generally accepted although there are proponents of a theory that cysts arise from degenerated Hassal's bodies.^{13,14}

Pathology

Thymic cysts can be small or large, smooth and

rounded, unilocular or multilocular. They usually contain yellow, green, brown, or reddish fluid, the color imparted by old or recent hemorrhage, or they may have clear fluid¹⁵ or they may contain no fluid.¹⁶ Though usually attached to thymic tissue by a stalk, the cyst may have offshoots that wrap around the great vessels and anchor it to lung and pericardium or other mediastinal structures. Microscopically, epithelial-lined cysts are seen with calcium, cholesterol clefts, and occasional hemorrhage into the cyst wall. Adjacent to or within the walls of the cysts, islands of thymic tissue are found in all cases.⁴

Because the cysts present a variety of gross and microscopic pathologic pictures, Seltzer and associates¹⁰ attempted to classify them into three basic groups. Those comprising Type 1 were multiloculated, smooth, thin-walled, translucent cysts with clear, thin fluid. Microscopically, the cyst wall revealed a single layer of squamous or low cuboidal epithelium or mesothelium with thymic tissue within the supporting stroma of the cyst wall.

Type 2 cysts were also multiloculated with thick fibrous walls. Cholesterol crystals, blood or calcium could be seen within the fluid or cyst wall. The fluid was turbid or grumous. Thymic tissue was also present in the cyst wall.

Type 3 cysts were multiloculated, with a thick, fibrous wall containing cheesy or gelatinous material. Microscopically, the walls had cholesterol clefts and other debris with foreign body giant cell reaction, chronic inflammation, old and recent hemorrhage, and fibrosis. No definite intramural thymic tissue was identifiable.

Seltzer and associates have reported, however, that all three types of cyst pattern in various stages of evolution may be shown in a single specimen.¹⁰

Clinical Features

Mediastinal thymic cysts may be encountered at any age. The oldest patient reported was a 75-year-old woman.⁷ The cysts display no sex predilection. The most frequent mode of presentation is an asymptomatic mediastinal mass in-

cidentally discovered on chest roentgenography. When symptoms do occur they are probably related to hemorrhage into the cyst. The most common symptoms are dyspnea, non-productive cough and pain in the chest and neck.^{10,15,17,18} Tussive syncope if present, is attributed to an increase in intrathoracic pressure and impairment of venous return with reduction in cardiac output and cerebral blood flow perhaps due to the size and location of the cyst.¹⁷

Physical examination is generally normal. When a systolic murmur is detected, it most likely results from compression of the outflow tract of the heart as described in other mediastinal lesions.^{19,20} Cardiomegaly^{9,15,21} and electrocardiographic changes have been reported.^{9,13,17}

Radiologically, the lesion is best seen on frontal projection. Typically, it is located in the anterior superior mediastinum or both. The mass, especially when large, may be visible on both the right and left sides of the mediastinum but it is more often unilateral. Rarely, calcification may be seen in the cyst wall; if present it is highly suggestive especially if it appears as an arcuate opacity along the outside wall of the cyst.¹⁰

When located in the anterior inferior mediastinum, thymic cysts may simulate cardiomegaly or pericardial cysts. When located in the superior mediastinum they may be confused with anomalies of the great vessels.^{22,23}

Preoperative diagnosis is almost never made. Indeed, sometimes the diagnosis of thymic cyst is actually made only after pathologic examination of the surgical specimen. There are no specific measures that can positively make a diagnosis. Selective angiography^{1,2,10,24} helps to exclude lesions which arise from the cardiovascular system and/or secondary to previous cardiovascular surgery, such as aneurysm of the aorta which has been reported after open heart surgery.

Treatment

Historically, excision of a thymic cyst in the neck of an eighteen-month-old boy was first attempted in 1901 by Polloson and Piery.²⁵ Only a partial removal was accomplished. The first surgical attempt at excision of a cervico-

mediastinal cyst in a young girl was reported by Pezcoller²⁶ in 1929. Hemorrhage prevented total removal of the cyst.

The first successful complete excision of a cervical thymic cyst was made in 1939 and was reported by Hyde, Sellers and Owen.²⁷ In 1947, articles which appeared simultaneously in the American and British literature reported the first complete excision of mediastinal thymic cysts at thoracotomy.^{16,23}

The prognosis for thymic cysts is excellent. Total surgical removal is recommended. Neither local recurrence nor malignant degeneration in a congenital thymic cyst has ever been reported.

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Intravenous administration should not be given because of increased likelihood of side effects.

Adverse Reactions: On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.

Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted.

Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses. For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed.

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This paper deals with the diagnosis of cri du chat in two older institutionalized individuals. One of these patients possesses a ring chromosome which is an unusual finding.

Cri du Chat

Clinical and Cytogenetic Findings in Two Older Patients

**A. R. Bailon, M.D., J. DaSilva, M.D.,
Barbara Schuh, Woodbridge**

It has been estimated that one percent of institutionalized individuals with profound mental retardation are affected with cri du chat. This syndrome was originally described by Lejeune, *et al.*, in 1963¹. They presented three cases which were found to have a deletion of the distal portion of the short arm of a B group chromosome, thought to be number 5. Subsequently, many cases of this syndrome have been reported²⁻⁴ including some with different types of structural rearrangements⁵.

Diagnosis of cri du chat in the infant is suggested by a characteristic cat-like cry and typical phenotypic features. The older patient, however, has no characteristic cry and a varying clinical phenotype.

In this report, we present two cases of cri du chat in older patients; one with a simple deletion of the short arm (5p-) and the other with a number 5 ring chromosome. Both patients are residents of a state school.

Case Histories

Case I—A 16-year-old female was born prematurely after eight months gestation. The pregnancy was complicated by vaginal bleeding during the sixth and eighth months. The patient weighed 2 pounds 13 ounces at birth, and was placed in an incubator. No cat-like cry was noted, although she was said to cry a great deal. Physical examination revealed microcephaly, hypertelorism, bilateral epicanthus, lenticular opacities, a broad-bridged nose, a partial cleft of the posterior hard palate, marked dorsal scoliosis, a congenitally dislocated hip, moderate contractures at the elbows, bilateral talipes equinus and webbing of the second and third toes. She has spasticity and contractures in the legs; and is non-ambulatory. Her I.Q. is less than five and she is non-verbal.

Case II—A 15-year-old female had an uneventful birth after seven months gestation. She weighed 3 pounds 13 ounces.

No cat-like cry was noted during infancy. Physical examination revealed an underdeveloped, undernourished female with microcephaly, slight antimongoloid slant, left epicanthus, mild internal strabismus, anisocoria, mild dorsal scoliosis and bilateral calcaneovalgus deformities. She is profoundly retarded, hyperactive and abusive to others. Her vocabulary consists of about 20 words. She can walk with aid.

Cytogenetic Findings

Chromosomal analysis of peripheral blood leukocytes revealed a modal count of 46 chromosomes in both cases. The chromosomes were identified by means of differential staining techniques⁶. All chromosomes appeared normal with the exception of the number 5 chromosomes. Case I's karyotype revealed a short arm deletion of a number 5 chromosome in all metaphases (figure 1.) Analysis of the chromosomes in Case 2 revealed a ring 5 chromosome in all cells (figure 2.) The karyotypes of her parents were normal. The karyotypes of the parents of Case 1 were not done.

Discussion

The only definite way of diagnosing cri du chat is by means of chromosome studies. However, the clinical appearance of the patient is usually the determining factor in instituting chromosomal studies. The classical picture of cri du chat is reported to reveal: microcephaly, hypertelorism, antimongoloid slant, epicanthal folds, strabismus, broad flattened nasal bridge, micrognathia, low set ears, a round moon-like face with occasional asymmetry and a characteristic cat-like cry.

The older patient with cri du chat does not present this classical picture. One of the most suggestive symptoms in the infant, the cat-like cry, disappears as the patient grows older. Diagnosis is further hindered by a changing clinical picture with the only invariable clinical finding

being mental retardation⁹. A study of 13 older patients^{7,9} revealed features (Table I) not often reported in younger cases. Although a good number of the physical features are the same, the patient no longer resembles the classic pictures, and may not suggest a diagnosis of cri du chat.

Table I

Features reported in older patients with cri du chat.

Frequent:

Small head
Thin face
Strabismus
Broad-based nose
Short philtrum
Malocclusion
Micrognathia
Prognathia
Low set ears
Short neck
Scoliosis
Waddling gait
Poor muscular development
Short metacarpals and/or metatarsals
Partial syndactyly
Pes planus
Premature greying of the hair
Dastasis recti

Occasional:

Facial asymmetry
Optic atrophy
Colobomata
Narrow external ear canal
Preauricular tags

Our two patients were discovered during a chromosomal survey of the residents of our institution. They both exhibit some of the classical features of cri du chat, but were not suspected of having this specific anomaly prior to chromosomal analysis. The reason for the oversight may be due to the nonspecific nature of the physical findings, as quite a few of those anomalies are frequently encountered in institutionalized individuals.

The chromosomal anomaly found in our two cases can result from four different mechanisms: (1) deletion of a portion of the short arm, the most common cause of cri du chat; (2) terminal deletion from the proximal and distal ends of the chromosome resulting in ring formation, as in the second case; (3) inheritance of

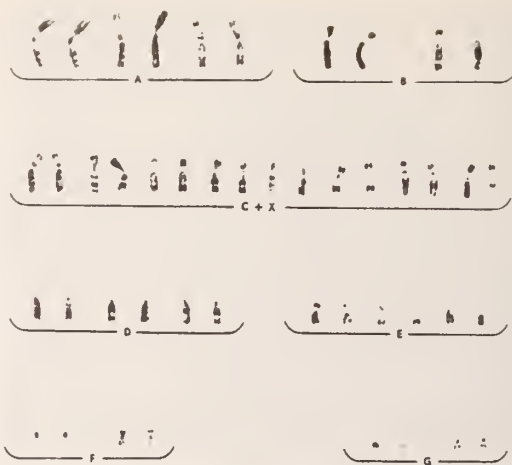


Figure 1

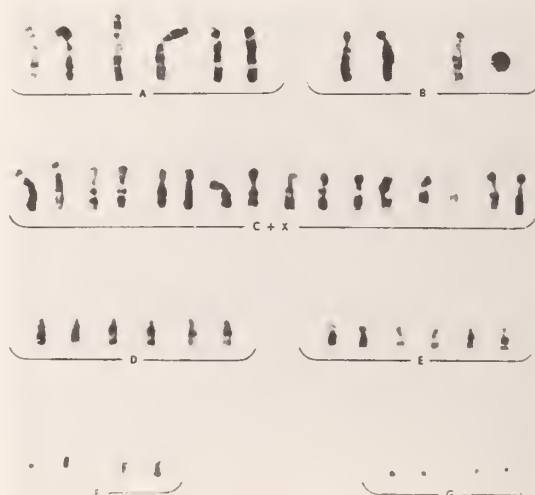


Figure 2

an unbalanced translocation from a parental carrier (this type accounts for 13 percent of the cases); or (4) unequal chromatid exchanges in meiosis.

Ring chromosomes are unusual. Only four other cases of ring 5 chromosome have been reported. And only one of these was studied with differential staining techniques⁶. In that case, it was impossible to determine the exact length of the short and long arm deletions. This was due to the fact that the deletions involved the light staining terminal bands of the long and short arms. In our case, the deletions also

involve the light terminal bands; and we too are unable to determine the exact length of the deletion.

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Quotes from a Corporate Chairman*

"One of the problems of the American medical profession is that there is no correlation between performance in medical school and performance in practice. None.

"If a government commission had worked on the horse, you would have had the first horse who could operate his knee joint in both directions. The only trouble would have been that he couldn't stand up.

"Medicare and Medicaid are the greatest measures yet devised to make the world safe for clerks.

"The schoolmaster, since time immemorial, has believed that the ass is an organ of learning. The longer you sit, the more you learn.

"Sociology is like acne. Civilization does not die from the disease, but it itches.

"We know nothing about motivation. All we can do is write books about it.

"Start with what is right rather than what is acceptable.

"The burden of decision frightens the young; they want to drop out to avoid it.

"The wonder of modern institutions is not that they work so badly, but that anything works at all.

"The computer is a moron.

"My greatest strength as a consultant is to be ignorant and ask a few questions."

*From *Drucker: The Man Who Invented the Corporate Society* by John J. Tarrant. Boston, Cahnners Books, Inc., 1976.



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THERE ARE A LOT OF PEOPLE GETTING BETWEEN YOU AND YOUR PATIENT.

Medicine today is in the spotlight, subjected to all kinds of scrutiny. Your control over patient therapy is being monitored, judged and occasionally abrogated, sometimes by unknown third parties.

The worry is that in the wake of this focus, the relationship between you and your patient will be weakened, without offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your non-generic prescriptions be filled with the precise products you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original NDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is a Federal regulation designed to cut the Government's drug bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only for the cost of the lowest-priced, purportedly equivalent,

generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than \$1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

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Lithium has become an integral part of our medical armamentarium as a prophylactic and therapeutic agent. Its use is extensive and the likelihood is that additional applications of this drug will be identified as research progresses. All physicians will be in contact with patients taking lithium, therefore, it is essential that we become aware of the rather unique therapeutic effects and the side effects of this chemical. It cannot be left to the psychiatrist alone to monitor and to be familiar with the drug since lithium can cause changes in both the clinical and biochemical conditions of the patient in such a way as to confuse the medical practitioner's diagnostic judgment, with potentially disastrous results. An appreciation of the cardiovascular, thyroid, hematological, gastrointestinal, neuromuscular, and central nervous system effects are essential. Appreciation of lithium intoxication, including its diagnosis and treatment by primary physicians, is also necessary.

The Systemic Effects of Lithium

**William A. Layman, M.D.,
Newark***

Lithium first became available in this country for general use in early 1970. Since that time it rapidly has gained widespread acceptance and presently is being used in the treatment of an ever-growing number of patients suffering from various forms of psychiatric illness. Because of the significant number of patients now being treated with lithium and the relatively unusual nature of the effects and side effects of this chemical all physicians should be familiar with the properties of this unique medication since they may have to evaluate patients in office or hospital practice. In considering the differential diagnosis of leukocytosis or hypothyroidism, one must now include lithium as a possible causative agent.

This paper is a review of lithium therapy with particular emphasis on its effects on the body as a whole, rather than on its specific use in the treatment of psychiatric entities.

History

Lithium was first reported as an effective means of dealing with manic illnesses by Cade¹ in 1949. Acceptance of lithium as a therapeutic entity was very slow, particularly in the United States. This was due partially to the fact that the lithium ion previously had been recommended for the treatment of a number of other illnesses including gout and kidney stones, only to be discredited after more careful evaluation. Later, lithium chloride was used as a salt substitute for patients who required reduced sodium intake,

but excessive use resulted in lithium intoxication and, in some cases, death.² The medical profession became skeptical of lithium as a therapeutic agent and acutely aware of its potential danger to humans. Despite early caution, reports began to flow in as researchers in various parts of the world explored the use of lithium for the treatment of manic conditions. As positive reports became preponderant, slow but inevitable acceptance for use in clinical practice followed. At the present time its value in the treatment of acute manic attacks and in the prophylaxis of many cases of manic depressive psychosis has been established.³

The specific biochemical action of lithium in manic depressive patients is not known. There is considerable evidence that it affects fluid and electrolyte balance, adrenocortical activity, and thyroid function; however, primary attention presently is focused on its effect upon brain neurotransmitter monoamines. These include the catecholamines, dopamine and norepinephrine, and the indoleamine, serotonin. The major biological theories regarding the etiology of manic depressive illness center about the actions of these chemicals and their role in the causation of mania and depression. This approach is supported by the fact that monoamine oxidase inhibitors have been demonstrated to be effective in the treatment of depression. At the present time, the specific effect of lithium on these neurotransmitters has not been established.

*Dr. Layman is Clinical Professor, Department of Psychiatry and Mental Health Science, New Jersey Medical School, CMDNJ, Newark.

Indications

Lithium carbonate is used primarily in the treatment of manic depressive psychoses. This affective disorder is marked by periodic severe mood swings into either mania or depression, or alternation between the two. Previously, treatment consisted of tricyclic antidepressants or neuroleptics, depending on the phase of the disease. It is now clear, however, that lithium is the treatment of choice in mania,³ possibly augmented by a neuroleptic in the early phases of treatment. It is also clear that maintenance therapy with lithium prevents or diminishes the intensity of subsequent episodes in manic-depressive patients who have suffered manic episodes.

In recent years there has been an increasing body of evidence suggesting that lithium may be effective in recurrent endogenous depression,⁴ particularly if there is a family history of manic-depressive illness.

Pre-treatment Evaluation

Prior to lithium therapy, it is essential that the general state of the patient's health be evaluated carefully and that specific laboratory examinations be performed. Each patient should have a thorough physical examination, electrocardiogram, complete blood count, urinalysis, blood urea nitrogen, serum creatinine, and thyroxine (T4). If fluid and sodium imbalance is suspected, electrolyte studies should be obtained.

Serious renal impairment is the only absolute contraindication to lithium therapy since it is excreted by the kidneys and impaired renal function would rapidly lead to dangerous toxicity. Cardiac disease, organic brain damage, or any treatment regimen which includes the limitation of sodium intake or diuretic therapy must be considered to be relative contraindications. The decision to use lithium in these situations is a clinical one based on evaluation of its potential benefits as compared to the possible hazards involved.

Treatment with Lithium

Lithium is presently available in the carbonate form in 300 mg. tablets or capsules. Initial dosage should be related to the severity of the illness, physical status of the patient, and his body

weight. The usual initial dosages range from 1,000 to 2,000 mg. a day in order to obtain serum lithium levels of 0.8 to 1.5 milliequivalents per liter. This must be monitored by biweekly serum lithium levels. There is generally a delay of between four to ten days before any therapeutic effect is observable, due to the relatively slow rate at which lithium crosses cell boundaries. Blood samples for lithium levels should be drawn a minimum of 12 hours after the last dose was taken; otherwise, the serum will contain quantities of recently ingested lithium which has not been absorbed and the result will be inaccurately high.

Once a therapeutic response has been obtained, the patient appears to require less lithium so the dose should be reduced in accordance with his clinical condition and the serum lithium levels. The goal generally is to maintain a blood level between 0.7 and 1.2 milliequivalents per liter, which usually can be accomplished with a dosage in the range of 600 to 1200 milligrams per day. Once the level has been established firmly, the monitoring of serum levels can be reduced to three to four-week intervals.

General Side Effects

Although most patients treated with lithium experience some side effects, these generally are not severe and do not necessitate the discontinuation of treatment. Interestingly, the most frequent complaint of lithium-treated patients is that they miss the "highs" that they had previously experienced while in manic or hypomanic states. The loss of feelings of great self-confidence and exhilaration is often acutely felt by the patient, who may discontinue the drug even at the risk of developing a severe and life-disrupting depression.

The most commonly encountered side effects are:

- (a) *Gastrointestinal* — Patients frequently complain of a mild "queasiness" of the stomach, anorexia, nausea, vomiting, diarrhea, and abdominal discomfort. These complaints often can be alleviated if the patient takes the medication following meals or with milk to avoid direct gastrointestinal irritation.
- (b) *Neuromuscular* — Generalized neuromuscular symptoms such as weakness, fatigue, hand tremor, and muscle cramping occur.

(c) *Central Nervous System* — Symptoms include lightheadedness, drowsiness, and confusion. Many patients complain that their thought processes feel restrained or slowed down.

(d) *Urinary Tract* — Polyuria and polydipsia.

With time, most of these side effects diminish or the patient accommodates to them. Although side effects are not dose related, their intensity is and, to the best of our current knowledge, they are totally reversible with the discontinuation of lithium treatment.

Long-range side effects often include fluid retention and associated weight gain, which is quite distressing to the patients. Unfortunately the treatment of fluid retention with diuretics is prohibited since this, in turn, can produce lithium intoxication.

Leukocytosis

Lithium produces an increase in the white cell count in the general range of 14,000 to 16,000 per cubic millimeter and, at times, higher. This appears quite early in the treatment and frequently persists throughout the administration of the drug. Lithium-induced leukocytosis must be taken into consideration in evaluating the blood count in the differential diagnosis of acute infectious states, prior to surgery, and in other conditions where an increase in white blood cells may play a diagnostic role. The rise appears among the neutrophils and mature granulocytes. This helps in the differential diagnosis of an infectious process since the typical left shift with increase in juvenile forms is not present. Lithium leukocytosis disappears with the discontinuation of the drug and there is no evidence at this time that it presents any hazard to the individual.

Cardiac Complications

Lithium treatment can produce significant electrocardiographic changes which most commonly consist of T wave flattening and inversion and widening of the QRS complex.⁵ This is quite similar to the electrocardiogram in hypokalemia, but the pattern is not corrected by potassium infusion. These changes are most likely caused by replacement of the potassium ion by the lithium ion in the myocardium. Alterations in the electrocardiogram, which are

seen most commonly when lithium intoxication (a serum lithium level of 2.0 milliequivalents per liter) occurs, appear to be totally reversible. Abnormalities in pulse due to alterations in myocardial electrolytes rather than any specific cardiac pathology may occur. When such findings are present, it is imperative that lithium be considered as a possible cause.

Alterations in Thyroid Function

Early in treatment, lithium regularly reduces the protein-bound iodine and thyroxine (T₄) which later return to normal. This initial mild hypothyroid state is later compensated for by an increase in thyroid stimulating hormone (TSH).⁶ Some cases of goiter and hypothyroidism have been reported with diffuse nontender enlargement. This clinical hypothyroidism is readily reversed by replacement therapy or discontinuation of lithium. To date, there have been no reports of permanent thyroid damage or malignancy arising from lithium treatment.

Pregnancy

Thus far, there have been no reports of teratogenicity in humans, however, it is known that lithium does pass the placental barrier. Therefore, the drug should not be prescribed during the first trimester since the possibility of fetal damage does exist.

Similarly, lithium should not be prescribed for nursing mothers since it appears in breast milk and can produce toxicity in the infant. In such cases, one must prescribe another medication or have the mother discontinue nursing so that lithium can be prescribed.

Lithium Intoxication

Although lithium intoxication generally occurs when the serum lithium level rises above two milliequivalents per liter, there are some patients who exhibit symptoms of intoxication at serum levels which ordinarily would be considered within the therapeutic range. For this reason it is essential that clinical judgment rather than serum levels be used to make the diagnosis of intoxication. Lithium intoxication is directly related to the intake of the lithium ion as related to the individual's ability to excrete it. When its ingestion exceeds the kidneys' ability to excrete it,

the lithium ion builds up and symptoms of intoxication appear. Clearly, this does not happen suddenly, since the intracellular absorption takes a considerable period of time. Even if an exceptionally large dose of lithium is taken in a suicide attempt, it will require a number of hours for signs of lithium intoxication to appear. Under the circumstances where a patient takes a chronic overdose it requires a number of days or even weeks before the symptoms of intoxication develop. This picture is essentially that of intensification of the various side effects described above. The patient complains of nausea, vomiting, and diarrhea. Neuromuscular symptoms and signs, such as gait disturbance, slurring of speech, and a gross tremor of the hands appear. The patient may be confused and progress to stupor and coma. Epileptic seizures with electroencephalographic abnormalities have been reported. The electrocardiogram is likely to show typical changes.

Treatment

Treatment of lithium intoxication is directed toward maintenance of the patient's well-being until the lithium is excreted. Of course, the drug should be immediately discontinued, fluid and electrolyte imbalance corrected, and the cardiac

and pulmonary status carefully observed. Since an individual with normal renal function can excrete one half of the lithium within 24 hours, symptomatic and supportive treatment is generally sufficient. To date there is no effective means to increase the excretion rate of lithium; diuretics are ineffective in this condition, but hemodialysis may be tried in severe or life threatening cases. Since death in unsuccessfully treated lithium intoxication is most commonly due to pulmonary complications, one should be especially alert during the acute phase.

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The Old Helping Hand Organization

Many of the younger doctors do not know that there exists in our state a unique helping hand organization, known as the Society for the Relief of the Widows and Orphans of Medical Men in New Jersey. This organization provides immediate

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Twenty-five patients with large villous adenomas were treated by in-hospital electrocoagulation over a ten-year period. Recurrences were noted in 24 percent, with 14 percent of the recurrences occurring as invasive adenocarcinoma requiring formal resection. One patient died as a result of metastatic adenocarcinoma after electrocoagulation of a benign villous adenoma. Recurrence rate is similar to that with local excision. Electrocoagulation allows larger villous adenomas of the rectum to be treated without radical extirpation of the anus and rectum. Though comparable in cure rate, electrocoagulation is less invasive for large villous lesions than local excision, with or without transphincteric division. It is the procedure of choice regardless of the presence of cellular atypia.

Electrocoagulation of Villous Adenomas of the Rectum*

**J. V. Lott, M.D., M. A. Weinstein, M.D.,
R. J. Rubin, M.D., E. P. Salvati, M.D.,
Plainfield**

Villous adenoma long has presented both a diagnostic and therapeutic dilemma to the surgeon. These lesions often are located low in the rectum where treatment may render the patient incontinent. Superimposed on this is the ever-present possibility of malignant transformation which Beahrs and Jackman¹ described in 50 percent of these tumors. Usually found in patients beyond the fifth decade, these lesions are conventionally treated by a major resection, with or without sphincter conservation, a posterior transacral excision, or transphincteric excision. There still remains the specter of recurrence with or without malignant transformation.

In the past, electrocoagulation has not been a popular treatment of these capricious neoplasms. This paper will discuss a select group of patients with villous adenoma of the rectum, treated with electrocoagulation therapy.

Methods and Material

Over a period of ten years, 25 patients with pure villous adenoma of the rectum were selected for treatment with in-hospital electrocoagulation. This group included only those patients with villous adenoma or villous adenoma with atypia. No cases with focal carcinoma or invasive carcinoma were included. Villo-glandular polyps which were treated by an outpatient procedure also were excluded. It should be

pointed out that many patients with villous tumors are seen in the office where small lesions of the rectum are treated by electrocoagulation. The 25 cases presented are a select group because they all had lesions which required in-hospital treatment.

Electrocoagulation was performed by one of two senior surgeons. The patients were followed in the office after discharge from the hospital at monthly intervals for one year and then bi-monthly for an additional year. Subsequently they will be seen at intervals of three to six months for the rest of their lives.

At each follow-up examination, sigmoidoscopy and liberal biopsy of any suspicious areas were performed; furthermore, digital examination of low lesions revealing induration in the electrocoagulation scar was followed with biopsy. Recently assays of carcinoembryonic antigen (CEA) at six month intervals have been incorporated into the follow-up.

The electrocoagulation technique has been described previously¹¹. The patients are admitted to the hospital one day prior to surgery. Preparation consists of Fleet Enema* in the evening and in the morning prior to surgery. Meperidine hydrochloride, hydroxyzine pamoate, and atropine are given as premedication. The patient is under "light" general anesthesia, with or without intubation, in the lithotomy position.

*This study is from the Division of Colon and Rectal Surgery, Muhlenberg Hospital, Plainfield, New Jersey

Local infiltration of the perianal region with 50 cc of 0.25 percent Marcaine®, 300 turbidity units of hyaluronidase, and 1:200,000 epinephrine was performed by the technique of Schneider.¹⁰ After local anesthesia, a Stortz® proctoscope, 15 cm. long and 40 mm in diameter is inserted through the anal sphincter into the rectum. In approximately one-fourth of the patients, a left lateral sphincterotomy was performed to accommodate the scope. The lesion is visualized and multiple biopsies are taken. Lesions located 10 cm. or less from the anal verge are candidates for electrocoagulation. Using the Cameron-Miller® Electrosurgical unit, set at 6 to 8, the lesion is electrocoagulated until an eschar of charred tumor is obtained. This tissue is then removed using a biopsy forceps or uterine curette. This process is repeated until normal tissue is reached or until a soft pliable ulcer base is obtained. This usually requires approximately one hour. No rectal packing is used. Postoperatively, the patient is given a regular diet, sitz baths, non-absorbable sulfa, and Surfak® (dioctyl-calceum sulfa succinate). The patient is ambulatory within 24 hours. After discharge from the hospital the patients take nonabsorbable sulfa and stool softeners until all wounds are healed. The first follow-up visit, which includes sigmoidoscopy, is one month after electrocoagulation.

Results

Twenty-five patients are included in this study. Male to female ratio is 1:1. The lesions occurred between the third and eighth decade with 88 percent of the patients greater than 52 years of age. Fifty percent of the lesions were located within four cm. of the anal verge with 82 percent within 8 cm. of the anal verge. The average lesion was 15 cm. squared.

These patients presented with varying types and durations of symptoms. Bleeding, the most common symptom occurred in 40 percent of patients, and watery diarrhea occurred in 30 percent. Other presenting symptoms consisted of prolapse, constipation, and tenesmus. It should be pointed out that the size of the lesion did not correlate with the symptoms. In our series, larger lesions were not necessarily associated with bleeding and/or diarrhea or mucus.

The average hospital stay was five days and follow-up averaged 18 months. Recurrences were noted in six of the patients (24 percent). Most recurrences appeared within one year from the initial procedure. Six patients had one recurrence each but one patient had seven recurrences of villous adenoma all treated with electrocoagulation with a successful outcome. One of the patients with a recurrence developed carcinoma which was treated successfully with electrocoagulation, and one patient developed a recurrence of invasive carcinoma and expired with metastatic disease. Thus, one patient out of six with recurrence, expired with metastatic carcinoma. There was no correlation between the size of the lesion and recurrence, although most of the lesions were quite large.

The complications noted from electrocoagulation previously have been described by Madden¹². Fever was the most common symptom in our series, appearing in 40 percent of the patients. This fever occurred within 24 to 48 hours of electrocoagulation. Evaluation, including blood cultures, was negative. The fever usually responded with gradual lysis over a 24 to 48 hour period. Bleeding which occurred in one patient, required readmission and transfusion of two units of whole blood. Two patients suffered perforation, one above the peritoneal reflection. This patient ultimately required a Hartman procedure for an intraperitoneal perforation. Stricture following coagulation occurred in six cases (24 percent). All patients with strictures were treated conservatively as office patients and were able to accommodate a 15 mm. sigmoidoscope through the stricture.

Discussion

Over the past 20 years the treatment of villous adenoma of the rectum, with or without concomitant carcinomatous transformation has undergone continuous change. Bacon² and Beahrs and Jackman¹ demonstrated the malignant potential of these neoplasms. Rates of malignant transformation in greater than 50 percent of villous adenomas often were quoted. It then followed that radical excision of these potentially malignant growths, with or without a concomitant stoma, was suggested by Bacon. With the passage of time, another approach was

suggested: Orringer and Eggleston⁷ in 1972, advocated local excision of villous adenomas with or without atypia. In their series there was a 26 percent recurrence rate with 80 percent of the recurrences noted to be benign. Because of their favorable experience with local excision, these authors suggested that radical surgery based on malignant potential is unwarranted. Jahadi and Baldwin⁸ found a 29 percent rate of recurrence following local excision of villous adenomas. In their series of 264 patients, 83 percent recurred as benign lesions. They too advocated a more conservative approach to villous adenomas of the rectum. Today, most authorities agree on the local conservative treatment of villous adenomas of the rectum.

Most authors with large experience in the local excision treatment of villous adenomas refer to surgical extirpation of the lesion, with or without suture of the mucosal defect, through a transphincteric endorectal or posterior trans-sacral approach. In the transphincteric procedures, as advocated by Mason and Oh,^{3,5} both external and internal sphincters as well as the pubo-rectalis muscle are divided in one plane, the lesion excised and the defect closed with accurate re-approximation of the anal musculature. This only allows excision of lesions that involve 30 to 50 percent of the rectal circumference. It is a tedious procedure, fraught with the danger of incontinence, pelvic and peritoneal sepsis, and tumor recurrence. Posterior approaches have lost favor, because of frequent formation of fistulas and sacral osteomyelitis. Endorectal procedures are effective, but good exposure is difficult to obtain. One additional procedure, which has been mentioned briefly in the literature by Quan and Castro⁴ is the use of snare cautery.

Our contention is that electrocoagulation will give similar recurrence rates as the above procedures, but it is technically easier to perform, it requires less operative and in-hospital time, and it can be utilized to eradicate lesions which are greater than 50 percent of the circumference of the rectum. Our series demonstrates a recurrence rate of 24 percent. Fourteen percent of the recurrences occurred as an invasive malignancy. This is indeed similar to the malignant recurrences reported with local excision.

The complications encountered with electrocoagulation are similar to those exhibited with local excision. While pelvic sepsis and, on occasion, intra-abdominal sepsis has resulted from a breakdown of a suture line from local excision, this is an extremely rare occurrence with electrocoagulation. While stricture occurred in approximately 30 percent of the cases, this often resulted from treatment of very large tumors, whose size would preclude successful local excision and reapproximation of the integrity of the rectal canal. In approximately 50 percent of our patients, a resection of the rectum would have been required in order to eradicate the neoplasm. Local excision would not be technically possible in such patients. Thus, through electrocoagulation, many patients have been cured of these lesions without sacrifice of their anorectum. Though our series is too small to include meaningful analysis of villous adenomas with invasive carcinoma, we believe that electrocoagulation is the treatment of choice here also. Electrocoagulation has been shown, in cases of carcinoma of the rectum, to control adequately local recurrences. If nodal metastasis has already occurred, only 27 percent will survive five years with radical surgery. In those patients with carcinoma treated by electrocoagulation with recurrence followed by radical surgery, approximately 40 percent survive five years.⁶ It appears that electrocoagulation was as good as—and perhaps better than—conventional radical treatment in the therapy of carcinoma of the rectum. McCabe and associates noted a similar percentage of nodal metastasis in villous adenoma of the rectum with invasive carcinoma, subjected to radical surgery, as compared to patients with primary invasive adeno-carcinoma of the rectum. Thus, it appears that an invasive adenocarcinoma arising in a villous tumor behaves like a primary adenocarcinoma of the rectum.

We suggest that electrocoagulation of villous adenomas and local excision are not mutually exclusive. In general, electrocoagulation is limited to lesions located below 10 cm. from the anal verge while local excision can be extended upward to the rectosigmoid region. However, we do insist that electrocoagulation since it is easier and can be used successfully in larger le-

sions without excessive blood loss or operative time is the treatment of choice in this older age group. For large lesions, both procedures must be performed in the operating room; both require general anesthesia and good exposure and both are quite time-consuming. The treatment of these capricious lesions should be placed in the hands of those experienced in the surgery of the anus, rectum, and colon in order to obtain a low recurrence rate as well as minimal complications.

Summary

Twenty-five selected patients with large villous adenomas, with or without atypia, were treated by in-hospital electrocoagulation over a 10 year period. Recurrences were noted in 24 percent of the group with 14 percent of the recurrences occurring as invasive adenocarcinoma requiring formal resection. One patient expired as a result of metastatic adenocarcinoma occurring after electrocoagulation of a benign villous adenoma. The recurrence rate is similar to that with local excision. Electrocoagulation allows larger villous adenomas of the rectum to be treated without radial extirpation of the anus and rectum. Though comparable in cure rate, electrocoagulation is less invasive for large villous lesions than local excision, with or without transphincteric division.

Electrocoagulation is the procedure of choice for villous adenomas of the rectum regardless of the presence of cellular atypia. Though the case for electrocoagulation of villous adenomas with invasive adenocarcinoma has not been firmly established statistically, a general trend

appears to support its efficacy in the management of these difficult lesions.

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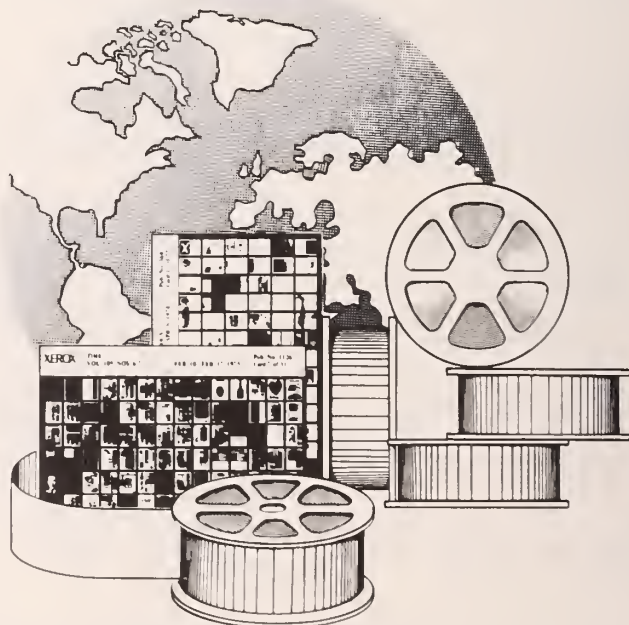
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Sterilization of the male and female has become a prominent form of contraception, especially among couples over 30 years of age. It now ranks second in popularity only to the birth control pill. Improved techniques in tubal sterilization using laparoscopy and cautery, and the recent increase in enthusiasm for vasectomy are responsible for most of this popularity. Permanent contraception should be elected by both members of the marital unit, while the sterilizing procedure itself should involve the more motivated and sexually interested of the two.

Permanent Contraception

**Robert J. DiBenedetto, M.D.,
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Contraception is the process of inhibiting fertilization and thereby preventing the establishment of pregnancy. Hormonal birth control pills and intrauterine devices currently are the most widely used methods of temporary contraception. Each of these methods carries with it a number of undesirable side effects, which preclude its use among certain groups of patients. It is partially because of such complications, along with improved surgical techniques, that sterilization has come to the foreground in the regulation of family size. Sterilization, in effect, has become a form of permanent contraception. By 1970, as Westoff has pointed out, sterilization was the contraceptive method of choice among couples in which the wife was 30 to 44 years old.¹ Among couples of all ages desiring no further children, sterilization was second only to the birth control pill.² The 1970 National Fertility Study indicated that nearly three million couples under age 45 had chosen sterilization for contraceptive reasons, therefore, one out of five couples able to bear children did not intend to bear any more. According to the Commission on Population Growth in 1972, about half of all sterilization procedures are chosen by women and half by men.³ The Association for Voluntary Sterilization (AVS) estimated that 800,000 vasectomies and 265,000 female sterilizations took place in the United States in 1971.⁴

The gynecologist, along with the general practitioner, is the physician consulted most frequently when a couple is desirous of permanent birth control. Traditionally, when confronted with the situation, he would advise some form of

female sterilization procedure, ranging from postpartum or interval tubal ligation to sterilization hysterectomy. The effectiveness and ease of performance of vasectomy has bestowed upon the male an active role in limiting the size of his family. It is the physician, as the consulting specialist, who now has a choice of two people when considering permanent contraceptive measures and it is he who has the responsibility to advise the proper procedure for the appropriate member of the couple in question.

Voluntary Female Sterilization

Originally, sterilization of the female was performed only for medical or eugenic reasons. Hospitals often used the "rule of 120" before permitting sterilization, in order to avoid accusations of unjustified sterilizing procedures.⁵ This rule states that the age of the mother multiplied by the number of her children must equal 120 or more to qualify for the operation. In other words, a woman of thirty must have four children and a woman of twenty must have at least six! On the basis of a study of 1830 tubal ligations with one death due to the procedure, Prystowski and Eastman concluded that sterilization for reasons of multiparity was not a medically justifiable operation.⁶ Despite admonitions of this type, and with the onset of laparoscopic tubal surgery, the pendulum has swung far in favor of tubal interruption for contraceptive purposes alone.

Emotional Sequelae to Female Sterilization

The various techniques used in performing tubal ligation are familiar and will not be repeated

*This study is from the Department of Obstetrics and Gynecology, Saint Barnabas Medical Center, Livingston, where Dr. DiBenedetto is Chief Resident, Dr. Gregori is Associate Director, and Dr. Breen is Director. Dr. Breen is also Clinical Professor of Obstetrics and Gynecology at Jefferson Medical College, Philadelphia.

here. Of concern to the physician contemplating tubal sterilization are the emotional sequelae his patient might develop postoperatively. Comprehension of potential psychological reactions will assist him in deciding in favor of or against this procedure for each female patient.

In a report of 225 women who were sterilized on social or psychiatric grounds, 85 percent of whom were simultaneously aborted, Ekblad found that 22 percent had some adverse reactions. He suggested that three factors were responsible for the psychiatric sequelae: (1) women under age 25; (2) a previous history of emotional instability; (3) the "package deal," where sterilization was a condition for termination of pregnancy.⁷ Thompson and Baird followed 186 women for two to nine years after sterilization and found 8.3 percent dissatisfaction with post-partum procedures. Nearly 25 percent of those sterilized for medical and psychiatric reasons regretted the operation.⁸ Barnes and Zuspan found that patients who suggested the procedure themselves (for multiparity) were more satisfied than those to whom it was offered for medical reasons.⁹ Most of their tubal ligations were done at the time of cesarean section and over 25 percent of these patients regretted the procedure. Di Musto, *et al.* found that 95 of 100 clinic patients studied were happy about the operation, while five had ambivalent feelings and none had regrets.¹⁰ They attributed this high incidence of satisfaction to thorough counseling of patients and their spouses, thereby reducing the risk of untoward psychological effects. About 65 percent of the women interviewed reported greater relaxation during coitus and 46 percent attested to greater satisfaction, while six noted some deterioration. Over 50 percent of these women experienced increased libido postoperatively, while four noted a decrease, and the remainder noticed no changes. Many of these changes can be attributed to release from fear of unwanted pregnancies, which resulted in improvement of the marital relationships of 40 percent of the women in this study.

Two studies of laparoscopic tubal sterilization by Steptoe and Jordan show the lowest reported incidence of postoperative regret, i.e., two percent and two-and-a-half percent.¹¹ It is some-

what simplistically suggested by Cox and Crozier that a small physical scar is associated with a small psychological scar.¹² In keeping with this theory, however, are the findings of Schwyhart and Kutner, who report that sterilization by tubal ligation has a better long-term psychological response than sterilization by hysterectomy.⁴ They attribute this difference to the less drastic effect of tubal ligation on body integrity and greater ease in formulating a restitutive fantasy of becoming pregnant in times of anxiety about loss of fertility. They contend that the prevalence of regret over sterilization has been underestimated and that it may be as high as 25 percent. This group concludes that low parity and concomitant abortion are high-risk factors from a psychological standpoint, although unsatisfied maternal desire may be more important than low parity per se. They suggest psychopathology, marital instability, high religiosity, misconceptions about the procedure and about alternative methods of birth control, inability to obtain consent of the spouse, recent severe loss, and inability to accept loss as additional relative contraindications to female sterilization.⁴

With regard to psychopathology, all of the studies reviewed here agree that sterilization of the emotionally unstable woman carries with it a high percentage of postoperative regret and dissatisfaction. The procedure should not be performed during periods of acute stress, such as after the birth of an unwanted or deformed child or amidst marital discord; in these situations the desire for permanent contraception might dissipate as the stress ameliorates.¹³

Pressure is another relative contraindication to permanent contraception. Patients who detect even a vague sense of coercion into the operating room from the family physician or social authorities have shown poor adjustment postoperatively. On the contrary, a gynecologist's firm advice may alleviate a woman's guilt over her decision to be sterilized. A short interval of time between this decision and the performance of the operation may deny the patient the time needed to consider all aspects of the proposed surgery. By taking time to work through ambivalence toward childbearing, the patient may avoid subsequent regret over being sterile.⁴

The most common reason offered by women for electing permanent contraception is that they consider their families complete and feel unable properly to care for more children.¹⁹ The primary reason for sterilization according to the male is more financial in nature. The most prevalent misconception about tubal sterilization concerns the reversibility of the procedure. As Baudry suggests, the misapprehension stems from the name of the procedure, that is, having the tubes "tied" implies that they can be "untied."¹³

Mathis suggests evaluation of each candidate for sterilization in three areas.¹⁴ The first concerns patient attitude toward the proposed surgery and the indications for the procedure. The second area deals with patient personality, with emphasis on her ability to accept loss. The contraindication here would be a history of prolonged depression following loss of relatively small value. The third area has to do with the patient's ongoing family situation, including her conception of how her spouse will react.⁶

Most authors agree that the physician's responsibility in choosing the proper female candidate for sterilization is threefold. First, it includes an evaluation of the patient, with emphasis on her psychological status. Second, it requires an objective and detailed description of the procedure proposed, with an explanation of the possible physical and psychological sequelae. Third, it calls for enumeration of alternative means toward the patient's desired goal, that is, limitation of family size.

Male Sterilization

The first vasectomy was performed by Cooper in 1830 upon a dog in order to study the histologic changes following this operation.¹⁵ Ochsner, in 1897, undertook the first clinical vasectomy and published a paper suggesting the operation for eugenic purposes.¹⁶

Since the day of Ochsner, voluntary male sterilization has grown immensely in popularity throughout the world. The Association for Voluntary Sterilization estimates a total of 1,357,000 sterilizing operations were performed

in 1974, among which 809,000 were vasectomies.¹⁷ About 200,000 vasectomies took place in 1969 as compared with 750,000 in 1970, only a year later.¹⁸ The first outpatient vasectomy service in the United States was started at the Margaret Sanger Research Bureau, Inc., in New York City in October 1969.³

Vasectomy is considered by many to be the safest and surest method of birth control presently known.³ Postoperatively, the patient is advised to use some form of contraception until two sperm samples, taken at about one-month intervals, are azoospermic.¹⁸ Some physicians recommend annual sperm counts indefinitely to protect against the rare occurrence of spontaneous reanastomosis.¹⁸ The patient should be advised that he will not notice any difference in the volume of ejaculate, since it is predominantly formed of prostatic secretions. This point is well stated in the March 1973 issue of the *Medical Journal of Australia*: "Most men do not appreciate that the testicular contribution to the volume of an ejaculation is only about five to ten percent, a difference that is not noticeable even to the connoisseur."²⁰ The physician should also emphasize to his patient that the level of sex hormones is unaffected, since testicular function is not disturbed by the procedure; virility and potency should therefore remain unchanged.²¹

Postoperative Complications

Although vasectomy is generally considered to be an uninvolved office procedure, there is a constellation of major and minor physical complications that can develop following this operation. Sobrero and Kohli followed 189 vasectomized patients from one to two years after surgery.²² One week postoperatively nine percent had specific complications such as small local hematoma, bleeding, or infection. Some 14 percent had subjective complaints, including pain, swelling, discomfort, oozing, or a combination thereof. The long-term study revealed that only 30 percent of all vasectomized patients reported absolutely no complaints at any stage after the surgery, whereas the rest indicated some kind of pain or swelling that persisted from one day to more than one month.

Complications of a more serious nature include injury to the structures of the spermatic cord, profuse scrotal bleeding requiring orchiectomy for control, testicular gangrene, embolism, painful erection, epididymitis, and infectious necrosis of the cord. Sperm leakage from the vas into surrounding scrotal tissues has caused spermatic granuloma. Jhaver found sperm agglutinating antibodies in 54 percent of cases, six months after vasectomy.²³ The significance of these antibodies is that their presence precludes guaranteed restoration to fertility after anatomic reanastomosis and re-establishment of vasal patency has been surgically accomplished.

Psychological, Sociological and Motivational Factors

Before discussing the psychological effects of vasectomy, it would be well to review the sociological characteristics and motivational factors of men electing this procedure. The average age at time of surgery is 38.5 years for the husband and 35 years for the wife. Most men are married from seven to 15 years and have at least the desired number of children before undergoing vasectomy. The average number of living children at the time of operation is 3.3. About 88 percent of vasectomized men are white, while relatively small numbers of black men elect vasectomy. Most studies indicate that the patient is usually of the Protestant religion, although a few list Catholic men in the majority. Jewish patients undergoing vasectomy rank third according to religion.³

In attempting to explain the surprisingly large numbers of Catholic males choosing vasectomy, Lear describes two motivating forces. The first maintains that many Catholics had come from large families and felt that they had been emotionally and educationally deprived. This group desired better emotional and financial support for their offspring. The second motivating factor is a rationalizing process which holds that if each act of contraception were a sin that had to be repeatedly confessed, then vasectomy would substitute one final transgression for many and would have to be confessed only once.²⁴

The socioeconomic status of vasectomized men is considerably higher than that of the national

average. One third of these men have at least college degrees and over 15 percent have postgraduate degrees. Nearly 60 percent are engaged in professional, managerial, or technical occupations. Virtually none of these men is an unskilled laborer.^{3,25}

About 60 percent of men undergoing vasectomy learn about the procedure through public communication, such as newspapers, magazine articles, and radio. Surprisingly, only about 15 percent of men hear of the operation from professional sources, such as doctors, nurses, or social workers.³

The primary motivating factor for obtaining vasectomy is financial. As previously mentioned, women most often elect sterilization in order to provide better maternal care for the children they have. Men, on the other hand, undergo vasectomy so that they can maintain an adequate standard of living for their offspring. Dissatisfaction with other methods of contraception and a higher than average experience with contraceptive failure, are probably the second most influential factors in leading to the choice of vasectomy.²⁶ Over 85 percent of vasectomized men and their wives have used at least one method of contraception, usually the birth control pill, before the operation.³ Very few men point to personal health, psychological well-being, or genetic reasons for electing vasectomy.

The psychological and psychosexual effects of vasectomy are often of greater importance to the physician and his patient, than are the multitude of mild physical sequelae associated with the procedure. Since vasectomy became a major form of contraception, psychiatrists have been quick to elucidate psychologically dangerous aspects of the operation. In 1954, Rosen wrote that sterilizing operations "are never performed merely as contraceptive measures," implying ulterior motives for performance of the procedure.²⁷ Erickson, in the same year, stated: "though vasectomy frequently is requested as a contraceptive measure it seldom or ever can be so considered . . . Some emotionally sick women would like to castrate their husbands, and manage for this reason to force their

own equally emotionally sick mates to request vasectomies. With other patients, the vasectomy may constitute an act of self-punishment."²⁸ He refers to the vasectomized man as the "dumb ox" as compared to the non-vasectomized "virile man," as evidence of society's unconscious regard and respect for the state of fertility. According to Wolfers, Erickson confuses vasectomy with castration, equates sterility with loss of gender, and confounds infertility with impotence.²⁹ While his position is extreme, nevertheless, it does point out that men frequently have a subconscious tendency to equate vasectomy with castration.

Although studies and reviews on the psychological effects of vasectomy abound in the literature, the longitudinal or prospective study of Ziegler *et al.* started in 1960, is by far the most comprehensive. Using the Minnesota Multiphasic Personality Inventory (MMPI) preoperatively and at intervals postoperatively, they published eight exemplary articles on the psychosocial aspects of vasectomy. In their 1965 publication, this group surmised that although there was almost unanimous satisfaction with the results of the vasectomy a year or more after the operation, a significant proportion of men showed increased psychological disturbance as measured by the MMPI.³⁰ The discrepancy in reported satisfaction with the procedure on one hand and evidence of psychological problems on the other, was described by Dandekar in 1963.³¹ He found that 92 percent of 1191 men were "favorable to vasectomy" after the operation, but that some 53 percent reported "weakened sexual desire." Lee in 1966, reported general enthusiasm for vasectomy in Korea, but the same paper presented a group of 20 post-vasectomy "sterilization neuroses" attributed to confusion of sterilization with castration.³² Ziegler *et al.* concluded that having committed themselves to a permanent procedure, the men may have been reluctant "to admit the vasectomy was a mistake," especially if they felt "they were no longer as masculine as before."³⁰ They ascribed the paradoxical findings referred to above as "dissonance reduction," in which persons in some situations tend to reassure themselves by focusing primarily on the favorable considerations of the situation, while ignoring or rationalizing contradictory

evidence. Furthermore, their data suggested that vasectomy was responded to as though it had real demasculinizing potential. As a result, the behavior of the vasectomized man was more scrutinized by himself and by others for evidence of "unmasculine" features. Activities deemed possibly unmasculine were anxiety-provoking and eliminated, thereby narrowing the range of the patient's acceptable behaviors. The ultimate result of this decreased flexibility was reduced personal effectiveness, heightened anxiety levels, abraded marital harmony, and decreased satisfaction of the wife.³³

In 1968 Ziegler reported the findings of another longitudinal study that compared, from a psychological standpoint, 42 couples in which the husbands were vasectomized with 42 couples in which the wives took oral contraceptives.³³ The study extended over a four-year period. The vasectomized group consistently attributed only favorable changes to the procedure, blaming other life circumstances for adverse changes in their emotional functioning or family situation. This group, however, showed more psychological pathology, as assessed by changes in psychological testing, than did the pill-taking group.

Of the two major groups, the vasectomized men rated their marriage less satisfactorily at the end of two years than did the husbands of the comparative group. The decreased behavioral flexibility of the vasectomized male referred to previously might have been instrumental in this regard. After four years, however, there were no significant differences in marital ratings between the groups.

With regard to sexual behavior, Ziegler *et al.* found initially a lower frequency of intercourse reported by the vasectomized group as opposed to the pill group. At the end of four years, however, there were no significant differences in these rates. There was no convincing evidence that vasectomy increased the probability of extramarital sexual relationships. The incidence of frigidity did not differ significantly between the two groups, and was not appreciably changed after vasectomy or after the use of ovulation suppressors. There were also no

noticeable differences in the incidence of impotence, premature ejaculation, or sexual drive between the two groups over the four-year period of study.³³

At the end of their four-year study, Ziegler's group found no impressive evidence that couples after vasectomy were psychologically worse off than a comparison group of couples, if assessed by standard indicators of pathology or disturbance. There were indications, however, that even four years post-vasectomy, men were still concerned about loss of masculinity, and were attempting to compensate for it by increased sexual frequency and other behavioral changes.

Although the study of Ziegler *et al.* is the most comprehensive thus far, it is probably the most critical of the psychosexual effects of vasectomy among the articles reviewed. Landis and Poffenberger followed the marital and sexual adjustments of 330 American couples, in which the husband underwent vasectomy between 1956 and 1961.³⁴ More than 90 percent of these couples decided jointly to employ vasectomy as their contraceptive method. About 80 percent of the men indicated that their reason for choosing vasectomy for themselves over salpingectomy for their wives was that the former surgery was easier. Half of the men felt that vasectomy was cheaper and about 20 percent indicated that they did not want to place any more contraceptive burdens on their wives.

About one-third of the husbands in the group reported improvement in their marital relationships with their wives after surgery. They attributed this largely to improvement in their sexual adjustment. More than half who noted marital improvement postoperatively reported removal of the fear of pregnancy, better relaxation on the part of their wives, and termination of arguments over sex and the use of contraceptives as reasons for this improvement. With regard to change in libido, 60 percent of the men in the study found none, 10 percent reported a marked increase, and 28 percent indicated some increase after vasectomy. About two percent of the men experienced decreased sexual desire after surgery. The greatest change in libido took place among Catholic patients (52 per-

cent) while 35 Protestant patients reported increased sexual interest.

With regard to sexual enjoyment after vasectomy, the large majority of men in this study attested to increased coital enjoyment among themselves and their wives. Kohli and Sobrero reported that two-thirds of the 189 patients they studied experienced increased sexual enjoyment after vasectomy, while only one person indicated a decrease. About one-third of this group reported increased sexual frequency after vasectomy, six patients reported a decrease, and the remainder noted no change. These authors concluded that vasectomy in general had no deleterious effects on men's sexual performance or pleasure. They proposed vasectomy, in many instances, stimulated sexual enthusiasm by eliminating anxiety over possible impregnation.² Wig and Singh followed 176 Indian patients who underwent vasectomy in 1967 to 1968.³⁵ These patients were of the country's lower socioeconomic agricultural and urban classes. The authors found undesirable sexual symptoms in 14 percent and 15 percent developed symptoms suggestive of neurotic depression. They concluded that persons developing symptoms following vasectomy were poorly motivated and had a relatively higher neurotic tendency.

Proper patient selection offers the best chance for post-vasectomy satisfaction. If possible, the physician should interview both members of the couple, so as better to evaluate marital stability. Informed consent is imperative regarding this procedure, and the patient must understand before electing vasectomy that it is a permanent form of contraception. Although techniques have been devised to restore patency to the vas deferens, the development of sperm immobilizing antibodies and other unknown factors inhibit the re-establishment of fertility in most cases.³⁶ As of 1973, there were five sperm banks in this country, where patients could deposit their own semen preoperatively for possible future use.²⁹ However, if a patient has to resort to sperm preservation in order to alleviate his anxieties concerning permanent sterility, he probably should not undergo the procedure at all. In keeping with informed consent, the wife

of the prospective patient must be made aware of the fact that should she become pregnant after the vasectomy, she is placing her marriage in severe jeopardy.³⁷

Uhlman, in two separate studies, evaluated the reasons most commonly offered by private physicians and clinics for refusing a patient desirous of vasectomy. In one study, he reported that most frequent reasons for which a candidate was denied vasectomy was because he was "too young." Most physicians were loathe to sterilize a patient if he were 18 to 21 years of age. The second most frequently cited contraindication to vasectomy was psychological instability.³⁸

Uhlman pointed out in another study that family parity should be coupled with age when determining patient eligibility. He found that when an applicant was over 40 years of age, regardless of the number of his children, 60 percent of physicians would grant a vasectomy. The most frequently selected age-parity category was a man between 20 and 26 years of age with two or more children.³⁹

The majority of physicians in the latter study considered the wife's consent to be the most important of the criteria used in vasectomy-patient selection. This factor was followed by religious conflict, marital stability, emotional stability, and marital status in order of relative importance. Most physicians held that religious conflict over sterilization procedures was a definite contraindication to vasectomy. They also maintained that unmarried men should not be denied the operation on the basis of marital status alone.

Lear states, in an editorial, that vasectomy is probably the best available method of permanent contraception and that it warrants the popularity it has achieved, but the medical profession should not condone "on demand" vasectomy any more than it would any other surgical procedure.³⁶ He surmises that the minimum three percent psychosexual complication-rate estimated by various surveys indicates that at least three percent of applicants should not have been vasectomized. He points out also that

because vasectomy is an operation to limit family size permanently, the "patient" is really the marital unit, not just the male.³⁶

In summary, it remains the physician's responsibility to evaluate each patient carefully in light of established indications and contraindications for vasectomy. If criteria such as those mentioned above are not met, the operation should be denied, and an alternative means of contraception should be offered the couple.

Concluding Comments

Contraceptive methods are, in themselves, neither beneficial nor detrimental. They are interpreted as such, however, according to the satisfaction or discontent experienced by people using them, and by physicians prescribing them. Permanent contraception or sterilization is no exception to this concept. Realizing this, the physician's goal is therefore to apply the right contraceptive method to the right couple. Ziegler *et al.* suggest the following criteria to select the member of a couple most amenable to successful contraceptive practice. If the female partner finds the sexual relationship desirable, is able to assume responsibility in the family, is not socially or intellectually subordinate to the male, is conscientious and is willing and capable to accept responsibility for contraception, then she would be the preferable candidate for temporary or permanent contraception in the family. If the husband is more socially and intellectually effective and the wife is more subordinate, less willing to provide contraception, and generally less interested in sexual behavior, then a masculine form of contraception would be more satisfactory. If permanent contraception is desired by the latter couple, and the husband is not hypochondriacal and has no apparent doubts about his own masculinity, vasectomy might be the contraceptive procedure of his choice.³⁴

In summary, the physician who selects a contraceptive method because, in his experience, it is most appropriate for the individuals being evaluated (rather than because it is most facile in his hands) offers his patients the greatest chance for satisfactory permanent contraception.

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CASE REPORTS

Echocardiograms in infants and children proved to be both diagnostic and practical when performed in a pediatric cardiologist's office.

Echocardiography

Experience in a Pediatric Office

Nakul Chandra, M.D., Long Branch

Echocardiography is a new tool in the diagnosis of acquired and congenital heart disease.¹⁻⁴ Atrial septal defect, pericardial effusion, patent ductus arteriosus and bacterial endocarditis are but a few conditions whose diagnosis can be aided by echocardiography. Since it is a noninvasive technique it may be used as an office procedure. A description of its usefulness and its limitations will be presented.

Method

Echocardiograms were recorded by a Model 1115 Echo channel of the Advanced Diagnostic Research (ADR) Unit. Transducers used were (1) 3.5 MHz (MegaHertz, million cycles per second) 0.3 cm. and (2) 2.25 MHz 0.5 cm. The display was made on an Electronics for Medicine VR6 unit. Recordings were made on Kodak PC paper. All studies were from the left sternal border in the supine position. Figure 3 which was recorded in an eight-year-old girl can be used as normal for the purpose of comparison. The electrocardiogram is recorded on the top of the tracing and the phonocardiogram at the bottom. These are useful markers identifying systole (between first and second heart sounds) and diastole. The anterior chest wall (ACW), right ventricle (RV), ventricular septum (VS), left ventricle (LV), mitral valve, myocardium and pericardium are seen from the top to the bottom.

Findings

Atrial Septal Defect—Case I. A heart murmur was found on a routine examination in a five-year-old boy. On examination his height and weight were in the twenty-fifth percentile for his age. The positive findings were confined to the cardiovascular system. The apex was located in the fourth left intercostal space in the midclavicular line. The first sound was normal; the second was split. There was an ejection, systolic, grade II harsh murmur which was best

heard in the second and third intercostal space along the left sternal border. The electrocardiogram was normal. An x-ray showed an enlarged heart. A clinical diagnosis of atrial septal defect was considered. The phono-echocardiograms (figure 1A) showed the ventricular septum moving away from the posterior myocardium during systole. This is a paradoxical motion, as seen in figure 1B, where, in systole, the septum moves toward the posterior myocardium as indicated by the arrows. An atrial septal defect was confirmed by cardiac catheterization. A left to right shunt was found to be greater than two to one. Subsequently, a four centimeter atrial defect was closed by open heart surgery.

Case II. A twelve-year-old girl, in whom a murmur was first heard at the age of five years, had frequent admissions to the hospital for fever and swelling of both large and small joints; she was considered to have rheumatic fever. On examination, the second sound was widely split, but varied with respiration. There was a grade II ejection, systolic murmur, heard best in the second and third intercostal space along the left sternal border. The electrocardiogram was normal. The x-ray showed a prominent pulmonary

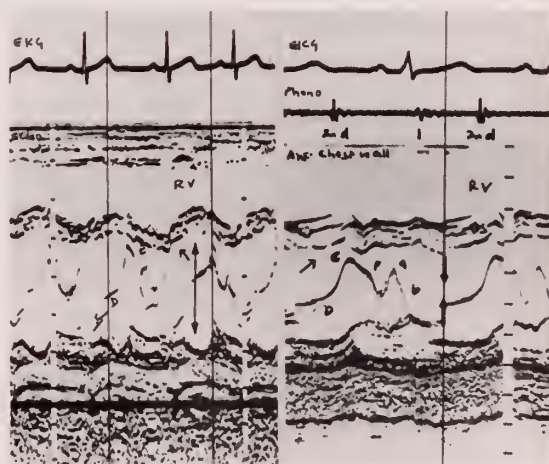


Figure 1A

Figure 1B

Figure 1A—Phono-echocardiogram recorded in a five-year-old boy with atrial septal defect. During systole, the ventricular septum moves away from the posterior myocardial wall (arrows). This is known as paradoxical motion of the ventricular septum, commonly found in atrial septal defect.

Figure 1B—Phono-cardiogram recorded in a twelve-year-old girl with patent foramen ovale. The ventricular septum moves toward the posterior myocardial wall (arrows). This is normal septum motion.

artery with increased vascularity. The clinical diagnosis of atrial septal defect was considered. The phono-echocardiogram (figure 1B) revealed a ventricular septum moving toward the posterior myocardium during systole. This is normal septal motion (figure B as compared to A). At cardiac catheterization, no atrial septal defect was found but a patent foramen ovale associated with a peripheral pulmonary artery coarctation was found.

Case III. A three-month-old female was referred to the office because of persistent tachypnea and possible cyanosis. Her respiratory rate was fifty per minute but she did not appear to be in any distress. A grade II to III ejection, systolic murmur was heard at the base of the heart. The electrocardiogram showed a right ventricular hypertrophy. An x-ray of the chest revealed cardiac enlargement with increased vascularity. A clinical diagnosis of left to right shunt with possible congestive heart failure was considered. The phono-echocardiogram revealed a normal septal motion (figure 2). Unexpectedly, a large atrial septal defect was found at cardiac catheterization.

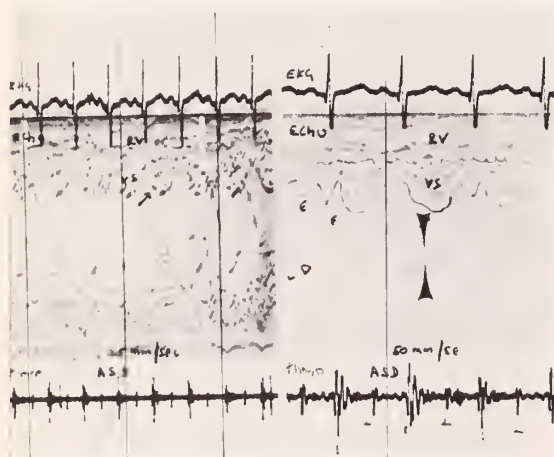


Figure 2—Phono-echocardiogram in a three-month-old girl who had a big atrial septal defect. The ventricular septum during systole is seen to move towards the posterior myocardium (arrows). This is normal ventricular septal motion. She had a large atrial septal defect by catheterization. This is a false negative result.

Pericardial Effusion—Case IV. Fever, anemia, and labored breathing were the reasons for admission of an eight-year-old girl. An x-ray showed an enlarged heart. The electrocardiogram was normal. Pericardial effusion was suspected clinically. A phono-echocardiogram (figure 3) revealed a space separating the myocardium from the pericardium. This represents a pericardial effusion. Seventy milliliters of straw-colored fluid were removed with immediate relief. A diagnosis of rheumatoid arthritis was made later.

Case V. A ten-year-old girl, known to have Tetralogy of Fallot, was seen in my office because of anemia and fever. A Blalock shunt had been performed during infancy. The x-ray of the chest showed an enlargement of the heart of recent origin. A diagnosis of possible subacute bacterial endocarditis was considered. A phono-echocardiogram (figure 4) showed no space between the myocardium and the pericardium, as seen in figure 3. This was interpreted as

showing no evidence of pericardial effusion. In the same tracing (arrow) multiple dense echoes were noted in the aortic area; these represent the vegetations of bacterial endocarditis. At operation the aortic valve was destroyed by bacterial invasion and approximately 1000 cc of fluid was found in the pericardium.

Patent Ductus Arteriosus—Case VI. A premature baby was in congestive heart failure at the age of one month. The birth weight was 1200 gm. Patent ductus arteriosus was diagnosed clinically and confirmed by echocardiogram and cardiac catheterization. The ductus was ligated. Figure 5 is a phono-echocardiogram before and after admission to the hospital for surgery. There is marked reduction of size of the left ventricle following surgery.

Discussion

The office echocardiogram did not prove to be one hundred percent diagnostic in atrial septal

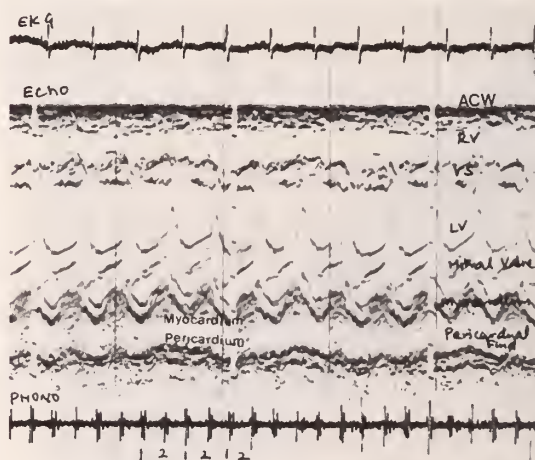


Figure 3—Phono-echocardiogram recorded in an eight-year-old girl. Pericardial fluid is seen as a space between the myocardium and the pericardium.

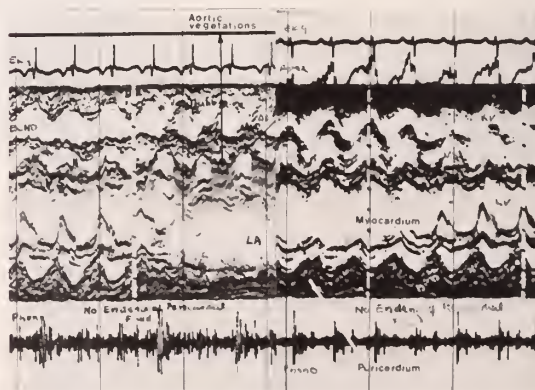


Figure 4—Phono-echocardiogram recorded in a ten-year-old girl. Multiple dense echoes (arrows) represent aortic vegetation of bacterial endocarditis. No space is seen between the myocardial and pericardial layers indicating the absence of pericardial fluid. This is a false negative finding.

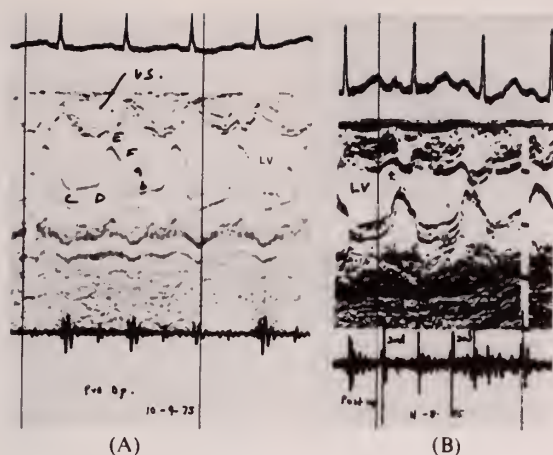


Figure 5—The echocardiogram was recorded (A) before and (B) after surgical closure of a patent ductus arteriosus. The depth in centimeter is documented by the markings on the side of Figure 5A and B. The size of the left ventricle is smaller in Figure B post-operatively as compared to Figure A.

defects, although it proved very useful in simple pericardial effusion, bacterial endocarditis with vegetations, and post-operatively in premature babies.

Monmouth Medical Center, Long Branch

Being a noninvasive test, echocardiography is extremely useful for the pediatric cardiologist. In some instances it can replace cardiac catheterizations. The use of echocardiography has been confined mostly to large hospitals, however, since the only requirement for this procedure is a cooperative child, echocardiography is especially suitable for performance in a pediatric cardiologist's office.

The problems usually are encountered in the office in the age group between one and three years which was not included in this study.

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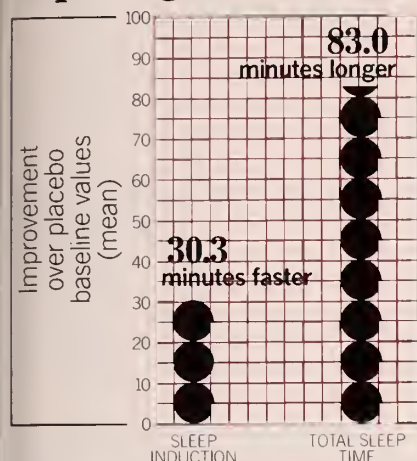
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Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Several studies of minor tranquilizers (chlor diazepam, diazepam, and meprobamate) suggest increased risk of congenital malformations during the first trimester of pregnancy. Dalmane, a benzodiazepine, has not been studied adequately to determine whether it may be associated with such an increased risk. Because use of these drugs is rarely a matter of urgency, their use during this period should almost always be avoided. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, limit initial dosage to 15 mg to preclude oversedation, dizziness and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in patients who are severely

depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, paradoxical reactions, e.g., excitement, stimulation and hyperactivity, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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This report presents a case of gastrocolic fistula secondary to a benign gastric ulcer in a 60-year-old female patient. Although the lesion is relatively rare, the entity should be considered in the differential diagnosis of patients with known peptic ulcer disease, with onset of persistent diarrhea and colicky abdominal pain. The barium enema examination has been shown to be the study of choice in demonstrating the fistula.

Gastrocolic Fistula in Association with Benign Peptic Ulcer

Aaron Schwinger, M.D. and Edward Wagman, M.D., Paramus*

Gastrocolic fistula is an uncommon entity that provokes the interest of the radiologist, internist, pathologist, and surgeon. It was first observed by Haller in association with malignancy in 1755.¹ The entity subsequently has been described as secondary to gastrointestinal cancer, gastroenterostomy, chronic ulcerative colitis, diverticulitis,² pancreatic abscess,³ carcinoid of the colon, tuberculosis, subphrenic abscess, trauma, lymphoma, and metastatic disease.⁴ Gastrocolic fistula, in association with benign peptic ulcer, is a relatively rare lesion, which was initially described by Bec.⁵ Firth reported the first case in the English literature in 1920.⁶ Taguchi⁷ collected 56 cases; Akwari⁸ reported on 46 patients, including five at the Mayo Clinic. There have been other recent reviews and individual case reports.⁹⁻¹⁵

The major symptoms, in order of frequency, are abdominal pain, diarrhea, loss of weight, and vomiting. Thus, in a patient with known peptic ulcer disease, and a change in symptomatology, particularly characterized by increased bowel movements, gastrocolic fistula should be considered.

Radiographically, in the non-malignant group, Thoeny¹⁶ reported demonstration of the fistula in 100 percent of the cases by barium enema and 26 percent of the cases by the use of the barium meal. Akwari's report confirms the superiority of the barium enema (100 percent) in establishing the diagnosis. There has been no adequate explanation for the superiority of the barium enema examination in the retrograde

flow from colon to stomach. It is plausible that the hydrostatic pressure utilized in the study is the accountable factor. Diarrhea, which is the second most frequent symptom, is not clearly understood. It has been proposed that intestinal bacterial over-growth, resulting from the regurgitation of colonic content into the stomach and proximal small bowel may produce injury and functional abnormalities manifested clinically by diarrhea.⁸ In his review of gastrocolic fistulas, Akwari found that 87 percent of the ulcers occurred on the greater curvature, and 13 percent on the lesser curvature aspect. Many cases of gastrocolic fistula due to benign gastric ulcer, have a history of steroid ingestion or intake of large quantities of acetylsalicylic acid. These drugs have been considered to play a role in the causation of peptic disease.

Case Report

A 60-year-old female was admitted to the hospital with a history of colicky abdominal pain associated with watery diarrhea and vomiting. There was no evidence of hematemesis or melena. The pain was described as epigastric, radiating to the back and relieved by bowel movements. The symptoms started approximately five months prior to admission and recurred periodically. There had been some weight loss. A duodenal ulcer was diagnosed by x-ray three years prior to admission. The patient remained on an ulcer regimen since that period. She had had a previous cholecystectomy and a hysterectomy. Physical examination revealed a poorly nourished patient with tenderness over the transverse and descending colon. The remainder of the examination was within normal limits.

Laboratory data on admission showed Hgb 15gm%, Hct 44%, WBC 17,600, Neut 76, Bands 1, Lymphs 23. Stool examination revealed occult blood. Urinalysis: 1 + acetone in the initial specimen; about 3 weeks after admission there were 16 RBCs and 100 WBCs/HPF; specific gravity 1.020 and 1 + coarse granular casts. The SMA-12, serum electrolytes and amylase were within normal limits.

*This case report is from the Bergen Pines County Hospital where Dr. Schwinger is Director, Department of Radiology, and Dr. Wagman is Director, Department of Pathology.



Figure 1 — Large gastric ulcer along greater curvature of stomach.



Figure 2 — Barium flow from transverse colon into the stomach.

An upper gastrointestinal x-ray series revealed a large gastric ulcer along the greater curvature of the stomach (Figure 1). Because of the persistence of diarrhea, a barium enema was performed. A preliminary film prior to the barium enema revealed no residual barium. The barium enema examination demonstrated flow of barium from the transverse colon into the stomach. (Figure 2)

An elective gastrectomy was carried out. The resected stomach showed a chronic ulcer six centimeters above the pyloric sphincter, along the greater curvature. The base of the ulcer which measured 2.8×1.8 cm, contained necrotic tissue, was perforated, and formed a fistula measuring about one cm in diameter, with a segment of colon which had a length of 17 cm. Bound to the serosa surrounding the fistula, there was a segment of hyperemic small bowel measuring 17 cm which did not show ulceration or fistula formation. Microscopically the ulcer had penetrated the entire thickness of the adherent gastric and colonic walls and showed chronic inflammatory and granulation tissue. The stomach and colon shared a common fibromuscular wall. The base of the ulcer was necrotic and contained infiltrates of acute inflammatory cells. The lamina propria of both gastric and colonic mucosa revealed plasma cells, eosinophils, and a few polymorphonuclear leucocytes. There was no evidence of malignancy. (Figure 3)



Figure 3 — Section shows deep penetration of chronic peptic ulcer into gastric wall. Stomach and colonic walls are joined by dense fibromuscular tissue. Colonic mucosa is well defined, forming a portion of the fistula tract.

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Bergen Pines County Hospital, Paramus

INFORMATION FOR READERS AND CONTRIBUTORS

The Journal, the official organ of The Medical Society of New Jersey, is published monthly under the direction of the Committee on Publication. *The Journal* is released the first week of the month, and a copy is sent to each member of the Society.

Change of Address: Notice of change of address should be sent promptly to The Medical Society of New Jersey, P.O. Box 904, Trenton, New Jersey 08605.

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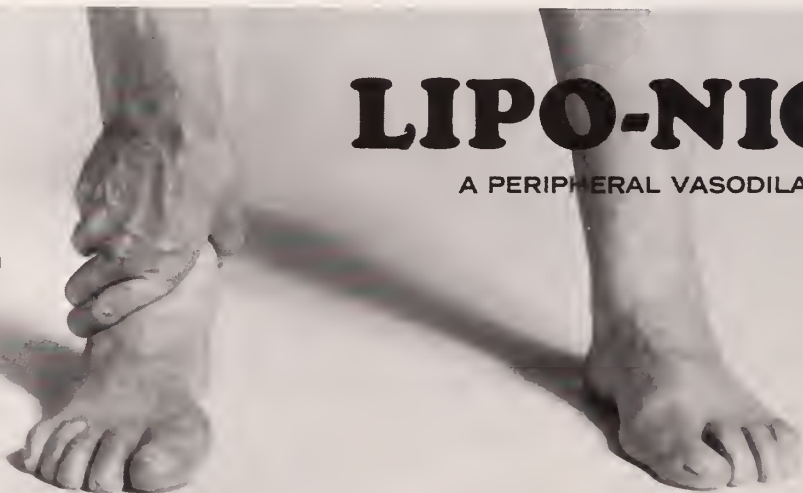
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¹ Goth, A. Medical Pharmacology, Principles and Concepts, ed 7, St. Louis, C. V. Mosby Company, 1974 p 455

² Schneider, R. P. and Roach, A. C. An Antacid Tasting The Relative Palatability of 19 Liquid Antacids, South Med J 69: 1312-1313 (Oct.) 1976

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Prescribing Habits in Practice *

Evidence continues to accumulate that we prescribe medicines much too often. Hypnotics and other psychotropic drugs, antibiotics, decongestants, antidiarrheal agents, and antipyretics are given unnecessarily most frequently. Despite pharmacology courses in medical school emphasizing therapeutic nihilism, the modern doctor often seeks a simplistic solution to his patient's problem by means of a prescribed medicine, despite clear-cut knowledge that a large percentage of illness relates to life-style, personality, and poverty.

Many of today's illnesses are acute, benign, and self-limited, and will respond to judicious neglect as quickly and certainly more cheaply than to unnecessary, possibly harmful medicines. This commentary will give some examples of inappropriate medicine use, attempt to explain why it occurs, and suggest methods for change.

The time-honored treatment of nonspecific gastroenteritis with diarrhea is aimed at a reduction of gastrointestinal motility and an attempt to solidify the stool. Recent evidence suggests that these methods either prolong gastroenteritis or make no difference to its severity or duration.

Otitis media is thought to be the result of eustachian tube obstruction, so systemic decongestants are prescribed, in addition to antibiotic therapy. Recent evidence suggests that these medicines are at best ineffective and may have harmful side effects.

Fever, the natural response to infection, is regularly treated with antipyretic medication, which is usually effective. Well-controlled studies, however, have demonstrated the inherent survival value of fever, showing that animals prevented from developing fever in response to infection have a higher mortality rate than those allowed to become febrile. Although fever may occasionally be detrimental (i.e., convulsigenic) our compulsion to deal with it aggressively must be questioned.

There is little doubt that some people have difficulty in falling asleep, but there is great doubt that this symptom is harmful and that chronic treatment with hypnotics is necessary or wise. Sleeplessness is usually the result of psychic or social problems, for which counseling may be helpful and desirable. Why do we substitute drugs for explanations and support?

Most respiratory infections are viral; those that are caused by bacteria easily can be identified by a simple diagnostic office procedure, throat culture. Treatment of viral illnesses with antibiotics does not shorten the illness, does not prevent complications, and is not innocuous. Careful diagnosis, explanation, reassurance, and followup should be the treatment of choice; antibiotics should be avoided. This area of overuse of drugs is so common as to be almost universal. The information regarding the valuelessness of antibiotics for viral respiratory infections has been known for years. Why then are they prescribed?

Have We Become Careless?

These examples are not exclusive; many others could be cited. What has happened to our therapeutic nihilism of second year pharmacology? What has happened to our common sense? The answer, of course, is that, by small steps we have become sloppy and careless and too busy to realize it. Stevens¹ citing Kafka states, "To write prescriptions is easy; to come to an understanding with people is harder," and "Treatment is good, but treatment after thinking is likely to be better . . . the essential reward is that the outcome in our patients, is, in the long term improved."

No physician wishes to do harm and avoids it if he is aware of it. Our overprescribing is done because we believe that the outcome will be at least as good and, in most instances, improved.

*The author, Richard H. Rapkin, M.D., is Associate Professor of Pediatrics and Associate Dean of Rutgers Medical School, CMDNJ, and Director, Pediatric Clinical Services, Raritan Valley Hospital, Green Brook.

We aren't dishonest but we have fallen into bad habits. We depend on experience, but as Oscar Wilde stated, "Experience is the name everyone gives to his mistakes."

After we left the theoretical sterility of the pharmacology lecture hall, we became practical. We learned that patients will not accept explanations, only medicines. We learned that prescription writing takes only a few moments, explanations longer. We learned that we feel more comfortable offering cures or remedies than admitting our impotence. But, we also have begun to learn of diseases of medical progress, of side effects of drugs, and of unnecessary medical cost. We must now learn the real meaning of the word doctor: a teacher.

If we are reasonably compulsive (and most of us got into medical school because we were that more than anything else) we try to stay abreast of current progress in therapeutics. We are very slow to apply what we learn, however, probably because it is difficult to change one's ways ("Performing a total gastrectomy on the kitchen table is peanuts compared with the effort involved in changing prescribing attitudes and habits in general practice.").¹ Changing means admitting to oneself that what one has been doing is incorrect—an admission for the egocentric physician (the other requirement for getting into medical school) which is very, very difficult.

What Can Be Done?

I suggest several remedies: (1) informal peer review in office practice, (2) assessment of frequency of drug use in the office population, (3) sharing of health education responsibility with patients, and (4) development of a belief that prescribing may be a greater evil than not prescribing when clearcut evidence for the former does not exist.

If one's office charts are reviewed privately, critically, and objectively by a colleague, much good can come. The knowledge that the charts will be reviewed tightens up charting procedures and the knowledge that therapeutic decisions will be questioned allows one to preempt the question by written justification. The

need to justify (to oneself and to others) what one is doing is thought-provoking. This is *the* major advantage, to the patient, of having medical students in the hospital. Stevens stated, "If treatment is good, treatment after thinking is likely to be better."¹

Although one may be able to justify drug use in individual patients, looking at one's population of patients often helps to eliminate carelessness. If, despite attempts at more careful use of antibiotics, one finds that 50 percent of patients with respiratory infections are receiving antibiotics, he must review more carefully and become more critical of his practice, since at least 75 percent of respiratory infections are viral.

The provision of primary care constitutes an unwritten contract, I believe, to educate the patient. This means enhancing that patient's ability to provide self-care and to avoid those habits or lifestyles which are detrimental to good health. This is not easy; it takes time and effort; it usually is not completely successful. But, it is the *sine qua non* of primary care.

Those of us in medical education must train physicians to understand and respect the dangers of uncritical therapy. We must teach our students that it is better to do nothing than to do harm. We must believe that ourselves. The physician who believes that he is a shaman and exclusively able to make people more healthy is inimical to superior medical care. If we are to improve our patients' health, it may be less through therapeutic intervention than through education. Urging the use of seat belts, appropriate diet, and adequate exercise, may do more good than many drug prescriptions. Providing support during stress is the major function of the health care provider.

Modern pharmacology has made great progress, but the prescription of medicines must be done specifically and carefully. We must believe that and practice that.

Richard H. Rapkin, M.D.

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NEW JERSEY DOCTORS' NOTEBOOK

Trustees' Minutes

March 20, 1977

A regular meeting of the Board of Trustees was held on Sunday, March 20, 1977, at the Executive Offices in Trenton. Detailed minutes are on file with the secretary of your county medical society. A summary of significant actions follows:

Program on Asbestos and Cancer . . . Agreed to cosponsor (with the New Jersey Public Health Association) a program on asbestos and cancer to be held May 25 in North Brunswick, by providing a major speaker and a grant of \$200.

Public Relations Status Report . . . Directed that additional copies of four television promotionals being aired in April—one dealing with smoking and three concerning the professional liability issue—be obtained (at a cost not to exceed \$100) for use by component societies. It was suggested further that these tapes be shown during the Annual Meeting in May.

Medical Defense and Insurance . . . Approved the following recommendation from the Committee on Medical Defense and Insurance:

That the proposed changes in the Society's Major Medical Expense Plan, as submitted by E. & W. Blanksteen Agency, Inc., in its letter of December 3, 1976, be accepted and made available to the membership.

Second Surgical Opinion . . . Received as informative the position paper (concerning the concept of second surgical opinion and the implementation of this benefit) of the Task Force on Second Surgical Opinion, which had been favorably received by the Council on Medical Services of the AMA. The Task Force, whose Chairman is James E. D. Gardam, M.D., was formed by the Professional Relations Committee, Council on Professional and Consumer Relations of the Health Insurance Association of America.

Professional Liability Assessment . . . Voted to support the following resolution which will be submitted to the 1977 House of Delegates:

Whereas, all physicians benefit, and have benefited, from a united profession; and

Whereas, directly or indirectly, all physicians are affected by the professional liability climate; and

Whereas, despite one's circumstance of employment or mode of practice, each physician has a transcending responsibility to the profession; now therefore be it

Resolved, that all regular dues-paying members shall be expected to honor the professional liability assessment, except as otherwise determined by the Executive Committee when considering individual requests for exemption.

. . . Voted not to support a resolution on the termination of the professional liability assessment which was presented for the Board's consideration.

Surgical Assistants . . . Referred the recent decision by the Appellate Division of the Superior Court of New Jersey concerning Elmer Community Hospital's appeal on the surgical assistant problem to the Joint Executive Committees of MSNJ and the New Jersey Hospital Association.

Britton Agency . . . Directed Legal Counsel to respond to a letter from the Bergen County Medical Society concerning the commissions of the Britton Agency under the Chubb Program.

. . . Directed that the letter in question and the response thereto be included in the delegates' material for the Annual Meeting.

Quality of Care in Obstetrics . . . Directed that MSNJ's Committee on Maternal and Infant Welfare be expanded to include pediatricians and neonatologists and assigned to study and act upon suggestions offered by Felix H. Vann, M.D., for improving the quality of care for obstetrical patients and the newborn. These suggestions are in response to a report of the (national) Committee on Perinatal Care which has resulted in stimulating all fifty states to imple-

ment its recommendations at the state, city, county or health service area level.

Use of Teletype . . . Authorized a feasibility study and cost analysis on the use of teletype between MSNJ and the component county societies.

Negotiations Programs . . . Authorized the arrangements, in cosponsorship with the AMA, for a negotiations seminar in New Jersey.

Seminar for Medical Practitioners . . . Noted that the National Endowment for the Humanities is supporting a program of seminars in humanities for physicians and other health professionals. These seminars bring together scholars in philosophy and ethics, history, sociology, and the health professions for a month of full-time study. Tuition is free and participants receive a \$1,200 stipend for expenses.

CAT Scanners . . . Directed that the Council on Medical Services investigate a report that Blue Cross and Blue Shield had established a fee schedule for CAT scanners which would offer differential reimbursement between hospitals and physicians.

Journal Editor . . . Voted to commend Arthur Krosnick, M.D., Editor of *The Journal*, for his editorial, "The Demise of Public Health Medicine in New Jersey," 74:210-211 (March) 1977.

Diagnosis-Related Groups . . . Directed that Mr. Richard E. Jamieson, Vice-President in charge of Information Systems at HRET, be invited to address the Board and County Presidents and Presidents-Elect in April on "Diagnosis-Related Groups."

Physicians' Relief Fund

The Physicians' Relief Fund of The Medical Society of New Jersey is available to members of MSNJ in need of financial assistance in time of emergency or catastrophe. Applications are made through your county medical society—write or call the Secretary or the Executive Secretary for information.

Report from the Foundation

Daniel J. O'Regan, M.D., Medical Director

About two years ago, the Foundation began calling the attention of New Jersey physicians to the HMO (Health Maintenance Organization) concept. Except for a few areas in the State, interest, if any, was minimal. In the past six months, however, interest seems to have responded to a few stimuli. Those stimuli are the realization that some doctors have found that *their* patients are enrolled in prepaid groups in Middlesex and Mercer Counties, Vineland, and elsewhere. The intention of many of our colleagues appears to be to develop a way to remove these prepaid groups, and/or to effect repeal of the legislation which fostered their development.

What about these HMOs? How did they come about? What can—or should—the practicing physicians do about it? Why is the New Jersey Foundation for Health Care Evaluation interested?

Many of the items in our Newsletter, and in our *Journal* articles have touched on the HMO and IPA (Individual Practice Association).

NJFHCE's purposes, as outlined in its Articles of Incorporation, include the following: (1) Promote, foster, and develop the availability of quality health care, either alone or in conjunction with individuals, doctors, hospitals, schools, corporations, foundations, funds, institutions, or governmental bodies. (2) Encourage entry into the health care system of every person within this State. (3) Improve the availability of appropriate ambulatory care as an alternative to institutional services—improve the availability of preventive services—and so on. Those who developed NJFHCE were men of wide vision who anticipated many things on the horizon in addition to PSRO.

On March 21, 1976 the Board of Trustees of MSNJ voted to endorse a resolution submitted by NJFHCE. The resolution states:

RESOLVED, that The Medical Society of New Jersey, through the New Jersey Foundation for Health Care Evalu-

ation, in cooperation with representatives of the component societies, develop a proposal for the development of one or more IPAs and/or a prepaid health contract with options.

Our IPA Committee, chaired by Dr. Richard Lang, has been meeting regularly since last September.

Why the focus of our interest on this topic? A glance at a map will show ten HMO or IPA organizations at various stages of development in our State at this time. This activity touches lower Bergen and Hudson, Essex, Morris, Middlesex, Mercer, Burlington, Camden, Cumberland, and some adjacent areas. The *Federal Register* of February 8, 1977 listed those HMOs which are federally qualified as of that date; 27 were listed—*three* are in New Jersey: Central Essex Health Plan in Orange; Health Care Plan of New Jersey, Inc., in Moorestown, and the Rutgers Community Health Plan in New Brunswick. Some of the other sites in this part of the country include New Haven, White Plains, Philadelphia, Providence, and Albany.

There are 182 HMO-like organizations in the country, serving more than six million people. Twenty-nine states have HMO laws. California started exactly in this way.

Kaiser-Permanente is a closed corporation; it owns its own hospitals, contracts with its own doctor groups as closed panels, and so on. The initial foundations for medical care did not deal directly with patients, but had claims' review arrangements with insurance carriers, with the *peer review* mechanism entering the picture. Full-service FMCs evolved, which enroll participants and physicians, negotiate with hospitals for patient services, pay providers directly, and offer a variety of services.

The HMO Act of 1973, which provided the assistance for demonstration projects mentioned previously, put a number of things together which, along with the 1976 amendments, gave new impetus to the concept. I am not telling you that you have to like this law—no more than the PSRO law, or the HSA law, or the Internal Revenue law—but I am telling you that it is here.

A Health Maintenance Organization is an entity with four essential attributes:

1. An organized system for providing health care in a geographic area, which entity accepts the responsibility to provide or assure the delivery of—
2. An agreed upon set of basic and supplemental health maintenance and treatment services to—
3. A voluntarily enrolled group of persons, and—
4. For which services the HMO is reimbursed through predetermined periodic prepayment, made by or on behalf of each person or family unit enrolled in the HMO without regard to the amount of actual services provided—P.L. 93-222.

The prepayment factor is paramount. The legislative intent says that: "HMOs are of public interest because the prototypes (Kaiser-Permanente foundations for medical care) *appear* to have demonstrated the potential for providing high quality medical services for less money than the rest of the medical system".

An HMO is a prepaid, closed-panel operation. It owns (or operates) its own buildings, has a closed panel of staff professionals, has agreements with hospitals, usually through insurers, provides 24 hour coverage, directly or *via* arrangements with hospitals, reimburses for covered services rendered by other than the HMO in cases of emergency or services rendered when the patient is out of the HMO area. The HMO must be fiscally sound; it must assume *full financial risk*, including reinsurance, have ongoing *quality assurance* programs, provide medical social services, and provide health education services and the continuing medical education of its staff. There is a long list of other requirements leading up to what is called a federally qualified HMO (such as the 27 cited earlier, with three in New Jersey).

We also have a strong *state* HMO law in New Jersey for becoming state-qualified. The Certificate of Need and HSA processes are directly involved in this.

You may say—"What do I care? They can't bother *my* practice." No? They won't? Ask your friends in Middlesex. What has happened is that an old patient of a doctor will tell him that

he'll go to the HMO to have his gallbladder out, since that is all prepaid, and he'll be back to see the family physician later on—just as it happened in California.

A "package" of care has to be put together, contracts signed, a realistic *premium* established, and it also has to be sold to potential customers. It has to compete with the Blues, with Prudential, and all the other carriers. It needs to get a good base of population.

Industrial spending for the health care packages they buy for their employees is worrying the companies. There is a growing list of companies which say that health care costs are as big a part of their expenditures as their raw materials. Union bargaining spends as much time on health benefits as it does on hours, wages, and pensions.

Why the note on industry and labor? Because the HMO Act says that everyone who employs 25 or more people in any calendar quarter shall offer HMO coverage to its employees as part of its health benefits plan. This applies to areas in which 25 or more of the employer's employees *reside*. The companies will eventually look to *qualified* HMOs.

This means that the employer has to give the HMO the same opportunity to advertise and market to the employees as his regular, usual health insurer. This is called the "*dual option*." It has many nuances, but it is a very effective *marketing* tool.

What *is* an IPA? It is an Individual Practice Association. It is *not* a closed panel. It is *not* in one building. The physicians work in their own offices. The patients and the doctors have freedom of choice. There *is* a prepayment factor, with sharing of *risk* by physicians. Fees are agreed upon according to a schedule approaching usual and customary fees, with a risk factor. Efficiency is promoted by the system. It is *not* simply a cost-control mechanism, because the element of *peer review* is a crucial one, for quality assurance as well as efficiency. Now you can see how the Foundation's interest ties in with our other roles.

The IPA can be associated with an HMO. An HMO can have several IPAs associated with it. IPAs can be associated with an FMC. Agreements on hospital coverage, actuarial services, marketing and reinsurance can be made in a variety of ways, often with carriers involved.

I *do* know that (1) the idea is here in New Jersey, (2) it is not going away, (3) pressure by federal and state government, labor, industry, and the public will increase, and (4) IPA comes closest to the traditional fee-for-service concept than any other form of prepaid care. We should pursue the idea of IPAs in many areas of the State, with a role for NJFHCE in coordination, in peer review and quality control, in spreading the risk *via* wide population enrollment (with lowered overall costs), and pursuing the resolution of the MSNJ Board, which is what we are doing. The New Jersey Association of Osteopathic Physicians and Surgeons is also involved in this.

CMDNJ Notes

Stanley S. Bergen, Jr., M.D.
President, CMDNJ

Teaching Hospital for RMS

Discussions are under way between CMDNJ and the 377-bed Middlesex General Hospital at New Brunswick, to use that facility as a core teaching hospital for the CMDNJ-Rutgers Medical School. After nearly a year of negotiations, a concept document was presented to trustees of both institutions. It outlines expansion of Middlesex General to include the addition of major teaching and referral services and construction of a \$12-million medical education building near the hospital. The Hospital would continue to operate under its existing administration.

Cost of the expansion has been estimated at \$30-million. Under the plan, funding would come from a \$37-million New Jersey Health Care Facilities Financing Authority bond issue, for which College and Hospital would make joint application. (The difference consists of net

interest during the construction period, actual financing costs, and the requirement for a debt reserve fund.) Similarly both institutions would seek appropriate certificates of need. It should be noted that the processes of funding and obtaining certificates of need are not quick ones, even with a signed affiliation contract in hand.

The affiliation would also set the stage for a significant expansion of the school's third and fourth-year classes, which are now limited to 56 students each of the 108 in the first and second-year classes.

The advantages of the MGH affiliation versus erecting a new college teaching hospital on the Piscataway campus have been considered and the College feels there are many benefits for hospital, school, and community in an affiliation, to say nothing of avoiding dual and/or competitive facilities.

Fiscally, there are many advantages. In early-1976 dollars, a project cost of \$34.5-million would have produced an 181-bed institution in Piscataway. Inflation has undoubtedly raised that price tag. Financing involves more than construction cost. There are financing charges, debt service, and other costs. The 1976 projection called for a \$45.5-million bond issue for Piscataway. The current projection for total financing of the MGH program is \$37-million. And the MGH program includes a teaching facility, which accounts for \$14-million of the total bond issue. A comparable building was not included in the Piscataway plan.

CMDNJ-Raritan Valley Hospital, Green Brook, continues as a teaching resource for CMDNJ-Rutgers Medical School. New programs would be phased in there, emphasizing primary care and reinforcing the hospital's character as a community institution.

CMDNJ Commencement—June 6

Two hundred and fifty-three degrees will be conferred at CMDNJ's annual commencement ceremony June 6, at the Garden State Arts Center, Holmdel. Members of The Medical Society

of New Jersey are most cordially invited to attend.

Doctor of Medicine degrees will be awarded to 182 graduates of the CMDNJ-New Jersey Medical School and the CMDNJ-Rutgers Medical School; D.M.D. degrees will be conferred on 62 graduates of the CMDNJ-New Jersey Dental School, and nine Ph.D. degrees will go to students of the CMDNJ-Graduate School of Biomedical Sciences.

The ceremony also will include presentation of certificates to 104 students completing programs at the CMDNJ-School of Allied Health Professions, which was accorded full school status last fall. The inclusion of those who have completed rigorous training in dental assisting, dietetics, emergency medical training, medical technology, nurse-midwifery, operating room technology, physician assisting, and respiratory therapy underscores the importance of their role in today's health-care system. The graduating class, 95 per cent New Jersey residents, includes nearly 20 per cent women and an equal number of minority students.

Health Education Day

"Think Health—Today and Every Day" is the slogan for New Jersey's second annual Health Education Day, proclaimed by Governor Brendan Byrne for Tuesday, May 10. At the Governor's request, CMDNJ provided guidance and resource backup to the state's schools, libraries, hospitals, pharmacies, and other educational and health-related institutions in formulating programs highlighting preventive medicine and good health habits. Opportunities were suggested for participation by the state's physician community.

CMDNJ's Offices of External Relations and Consumer Health Education developed and distributed a poster featuring the Health Education Day theme and a package of resource material to stimulate local observances. The College's role was supported by a grant from the Prudential Insurance Company of America through the Foundation of CMDNJ.

Preventive Health Practices Among MSNJ Physicians

This report of a survey of health practices by New Jersey physicians was prepared by Douglas O. Gause, D.P.H., Marvin A. Lavenhar, Ph.D.; and Donald B. Louria, M.D., and is from the Department of Preventive Medicine and Community Health, New Jersey Medical School, Newark, New Jersey.

In the March 1976 issue of *The Journal*, physician readers were asked to respond to a questionnaire inquiring about their personal health practices and their involvement in health education programs. The questionnaire was developed following the formulation of a program for primary and secondary prevention among ostensibly healthy adults.¹ This 9-12 point program (9 basic points, 3 additional recommended actions) not only encompasses health-related actions but also recommends participation in health education. Because physicians are the leaders in health-related activities and are regarded as the most credible health educators, we felt it desirable to query a sample of physicians to determine physician health practices and participation in community and school health education. Parts of the data were presented at the second annual Governor's Conference which was held on June 5, 1976 during the 210th Annual Meeting of the MSNJ. This report summarizes the survey findings.

Results

Two-hundred seventy-four physicians returned questionnaires. Since this is equivalent to only

three percent of the estimated 9,364² physicians practicing in New Jersey in 1975, caution must be exercised in making inferences.

With respect to geographical location, the distribution of respondents was similar to that of all practicing New Jersey physicians. This fact was established by comparing the percentages of practicing physicians in New Jersey's four health planning areas—North, North Central, South Central and South—with the percentages for questionnaire respondents (based on the 72 percent of respondents whose location was obtainable from their letterhead.) For each region the percentage of practicing physicians was within three points of the percentage of respondents. The male:female ratio for the respondents was 9:1, the same as that for all licensed New Jersey physicians in 1976³. The survey respondents were somewhat older than the average age of licensed New Jersey physicians in 1975, 44 percent of the former being under age 50 as compared to 57 percent of the latter.

It may be seen (Table 1) that the physicians responding to the questionnaire did well in most of the health practices examined (smoking habits; PAP smears; blood pressure, cholesterol and hemoglobin determinations; prostate and breast examination), but that they did relatively poorly in three areas—use of seat belts, testing for glaucoma, and examination of stools for occult blood. About two out of five did not use seat belts. Among individuals aged 35 and over almost two out of five had not been tested with-

Table 1
Compliance Among Respondents to Health Practices Questionnaire

	Yes	No
Smoking: Don't smoke or smoke fewer than 10 cigarettes per day	89	11
Seat belts: Usually or always used	61	39
Blood pressure: Checked within last two years	91	9
Glaucoma: Checked within last two years among group aged 35 and over	64	36
Cholesterol: Checked within last two years	78	22
Hemoglobin: Checked within last two years	79	21
Stools: Tested for occult blood within last two years among group aged 35 and over	41	59
Prostate: Examined within last two years among men aged 50 and over	71	29
Pap smear: Obtained within last two years	86	14
Breast: Examination by "expert" within last two years	82	18
Breast: Self examination at least three times/year among women	78	22

Table 2
*Preventive Practices Among Physicians
involved or not involved in Health Education*

	Health Education	
	Yes	No
1. Smoke cigarettes:		
yes	9%	14%
no	63%	58%
use to	28%	28%
If yes, smoke		
<10	22%	8%
10-19	44%	38%
>19	34%	54%
If yes, use filter tips		
always	100%	78%
2. Use seat belts:		
when driving		
always or usually	66%	59%
sometimes or never	34%	41%
to restrain children		
always or usually	57%	42%
3. Had test for:		
blood pressure within		
2 years	92%	89%
glaucoma within 2 years		
(age group over 34)	62%	66%
blood cholesterol		
within 2 years	82%	74%
anemia within 2 years	82%	75%
blood in stool within		
2 years (age group		
over 34)	38%	37%
prostatic nodules		
within 2 years		
(age group over 49)	66%	57%
pap smear within		
2 years	100%	76%
physical examination of		
breast (other than self-		
examination) within		
2 years	91%	76%
self examination of breast		
within past year		
12 or more times	40%	29%

in two years for elevated intraocular pressure and about three of five had not had their stools studied for occult blood.

In the area of health education, only a minority were involved: ten percent participated in school curriculum development, 20 percent participated in school health education programs, and only 11 percent spent over three hours a month in community health education. Table 2 indicates that compliance on health practices was considerably better for those involved in health education than for those who indicated no such involvement.

Conclusion

It would seem reasonable to initiate an intensive dialogue within the medical profession concerning just what can be prevented by primary (risk factor modification) and secondary (early intervention) techniques. If a program, either ours or a similar program, is adopted by the profession, and if this results in greater physician compliance in regard to personal preventive medicine, one of the benefits may be more extensive involvement by our profession in health education.

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Commemorative Bottle Sale for Medical Student Loan Fund

In conjunction with the celebration of the 50th anniversary of the Medical Society of New Jersey Auxiliary a limited number of commemorative amethyst glass bottles will be available for sale during the Annual Meeting to benefit the Medical Student Loan Fund. Each bottle will be embossed with the seal of the Auxiliary on one side and with the MSNJ headquarters building on the reverse. The cost is \$7.50.

PHYSICIANS SEEKING LOCATION IN NEW JERSEY

The following physicians have written to the Executive Office of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ANESTHESIOLOGY—Lessly V.T. Sebastian, M.D., 353 East 17th Street, Apt. 8-C, New York, New York 10003. National (Taiwan) 1965. Board eligible. Group or partnership. Available July 1977.

Patricia Wood, M.D., 45 Cleveland Lane, Princeton 08540. New Zealand 1960. Subspecialty, general practice. Group, partnership, hospital-based. Available.

Kuang Ming Chen, M.D., 130 West 12th Street, Apt. 7-J, New York 10011. Kaohsiung (Taiwan) 1971. Board eligible. Partnership or solo. Available July 1977.

Manjit S. Chowdhary, M.D., 1601 18th Street, NW., Apt. 205, Washington, D.C. 20009. Maulana Azad Medical College (India) Board certified. Group, partnership, solo. Available July 1977.

Rodolfo Villarin Babiera, M.D., 150-72 Village Road, Apt. 104-GA, Jamaica, New York 11432. Cebu

(Philippines) 1967. Board eligible. Group. Available July 1977.

CARDIOLOGY—Harrison Y.N. Yang, M.D., 1901 Dorchester Road, Apt. 5-B, Brooklyn, New York 11226. Taiwan 1970. Subspecialty internal medicine. Board eligible (IM) Hospital-based practice in cardiology, or teaching post. Available July 1977.

Lalji S. Chudasama, M.D., 49 Murdock Court, Apt. 4-J, Brooklyn, New York 11223. Makerere (Uganda) 1968. Subspecialty, internal medicine. Board certified (IM). Group, partnership, solo. Available July 1977.

FAMILY PRACTICE—Robert Cappa, M.D., 6402 Greyfield Road, Fayetteville, North Carolina 28303. Mt. Sinai (NYC) 1971. Board eligible. Group or partnership. Available July 1977.

GASTROENTEROLOGY—Bernard M. Aaron, M.D., 44 Gristmill Drive, Kings Park, New York 11754. SUNY (Downstate) 1969. Subspecialty, internal medicine. Board certified (gastroenterology and IM) Group or partnership. Available July 1977.

GENERAL PRACTICE—Soon Ha Park, M.D., 1359 West 83rd Street, Apt. 302, Cleveland, Ohio 44102. Korea 1964. Group or solo. Available July 1977.

Wan Soo Chung, M.D., 306 South Main Street, Suffolk, Virginia 23434. Korea 1971. Solo (hospital-based). Available September 1977.

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Syed A. A. Shah, M.D., Mailbox No. 8, Bergen Pines County Hospital, Paramus 07652. King Edward College (Pakistan). Any type of practice. Available July 1977.

Marianne E. Carter, M.D., 45-41 39th Place, Apt. 2-D, Long Island City, New York 11104. Buenos Aires 1960. Special interest in pathology. Any type of practice. Available.

HEMATOLOGY/ONCOLOGY—Nancy S. Scher, M.D., 136 Kirkbride Road, Voorhees 08043. University of Pennsylvania 1971. Subspecialty, internal medicine. Board certified (IM and hematology). Hospital-based or group. Available July 1977.

Barry Charles Freeman, M.D., 333 East 75th Street, New York, New York 10021. SUNY (Upstate) 1970. Subspecialty, internal medicine. Board certified (IM and hematology). Group or partnership. Available July 1977.

HOUSE PHYSICIAN—Rukhsana Mughal, M.D., 6879 Hickory Hill Drive, Mayfield, Cleveland, Ohio 44143. Dow (Karachi, Pakistan) 1973. Any specialty. Available.

INTERNAL MEDICINE—Charles Schiffer, M.D., 4 Grant Court, Guilderland, New York 12084. Cincinnati 1970. Subspecialty, nephrology. Board certified. Group or partnership. Available July 1977.

A.K. Patel, M.D., 1770 Grand Concourse, Apt. 8-K, Bronx, New York 10457. Ranchi (India) 1968. Subspecialty, gastroenterology. Board eligible. Solo or partnership. Available July 1977.

Steven Koval, M.D., 3221 Oxford Avenue, Bronx, New York 10463. SUNY (Downstate) 1973. Board certified. Group or partnership. Available July 1977.

Henry A. Schechter, M.D., 3671 Hudson Manor Terrace, Bronx, New York 10463. Einstein 1964. Subspecialty, nephrology. Group or partnership. Available.

Nairvittil Chandrasikharan, M.D., Bergen Pines County Hospital, East Ridgewood Avenue, Paramus 07652. Trivandrum (India) 1962. Subspecialty, cardiology. Board certified, (IM). Any type practice. Available July 1977.

Edward R. Deverson, M.D., 605-S Spinnaker Apts., Sea Isle City 08243. Pittsburgh, 1941. Subspecialty, geriatrics. Institutional, group, or administrative. Available.

OBSTETRICS/GYNECOLOGY—N.K. Gupta, M.D., 1650 Selwyn Avenue, Apt. 8-B, Bronx, New York 10457. M.A.M. College (Dehli) 1975. Group, partnership, solo. Available July 1978.

Kuo Juh Chan, M.D., 6152 Parkway Drive, Baltimore, Maryland, 21212. Taipei (Taiwan) 1970. Board eligible. Group, partnership, solo, or hospital-based. Available July 1977.

ORTHOPEDIC SURGERY—Roy B. Friedenthal, M.D., 6049 Huxley Ave., Bronx, New York 10471. New York Medical College 1973. Board eligible. Solo, partnership, single specialty group. Available July 1977.

PATHOLOGY/HEMATOLOGY—Jack Sanford Weinstein, M.D., P.O. Box 368, South Orange 07079. CMDNJ 1966. Board certified (pathology). To associate in hospital practice. Available June 1977.

PEDIATRICS—Gianmaria Minervini, M.D., 374 Getz Avenue, Staten Island, New York 10312. NYU 1973. Board eligible. Solo, associate, or small group. Available July 1977.

Chalerm Sunhachawee, M.D., 112 Washington Street, Warsaw, New York 14569. Siriraj (Thailand) 1966. Board certified. Group, partnership, or solo. Available July 1977.

Shrikrishna K. Mate, M.D., 1945 Corlies Avenue, Neptune 07753. Sethgorhandas (India) 1972. Board eligible. Group, solo, partnership. Available July 1977.

Harish B. Kothari, M.D., 28-03 Newtown Avenue, Long Island City, New York 11102. B. J. Medical College (India) 1969. Board eligible. Group, partnership, clinic, emergency room. Available July 1977.

Gupta B. Kuna, M.D., 200 Carman Avenue, Apt. 8-G, East Meadow, New York 11554. S.V. Medical College (Tirupah, India) 1966. Special interest—pediatric endocrinology. Board eligible. Solo practice—general pediatrics. Available June 1977.

PHYSICAL MEDICINE/REHABILITATION—Daniel R. Ignacio, M.D., 17-F Clintwood Drive, Rochester, New York 14620. Far Eastern (Philippines) 1973. Board eligible. Hospital-based practice. Available July 1977.

PSYCHIATRY—Sureshchandra N. Desai, M.D., King Edward Building, Apt. B-411, 79-11 41st Avenue, Elmhurst, Queens, New York 11373. Baroda (India) 1969. Subspecialty, child psychiatry. Board certified. Hospital-based clinic, academic group, partnership, solo. Available August 1977.

Angeline C. N. Desai, M.D., King Edward Building, Apt. B-411, 79-11 41st Avenue, Elmhurst, Queens, New York 11373. Ceylon (Sri-Lanka). Subspecialty, child psychiatry. Board certified. Hospital-based clinic, academic, group, partnership, solo. Available August 1977.

RHEUMATOLOGY—Lawrence Russomanno, M.D., 702 Charlesgate Circle, East Amherst, New York 14051. Bologna (Italy) 1972. Subspecialty, internal medicine. Board certified (IM). Clinical practice as associate or partner. Available July 1977.

SURGERY—Narayanan Ponnusamy, M.D., 1770 Grand Concourse, Apt. 7-F, Bronx, New York 10457. Madurai (India) 1969. Institutional (surgical house officer). Available July 1977.

Luis A. Palma, M.D., 44 Linden Street, Apt. 7-B, Pittsfield, Massachusetts 01201. Cordoba (Argentina) 1968. Board eligible. Any type practice. Available July 1977.

Sang T. Park, M.D., 9324 Pickwick Circle, W. Bldg. 4, Taylor, Michigan 48180. Kyongbuk (Korea) 1968. Board eligible. Group, partnership, solo. Available July 1977.

Eli Anker, M.D., 3450-28 Wayne Avenue, Bronx, New York 10467. Einstein 1972. Subspecialty, vascular surgery. Board eligible. Group, partnership, solo. Available July 1977.

Carlos A. Medina, M.D., 66-53 69th Street, Middle Village, New York 11379. Colombia 1971. Board eligible. Group. Available July 1977.

Mariano S. Morales, M.D., 11 Bernard Street, Port Washington, New York 11050. Philippines 1962. Any type practice. Available July 1977.

M. Mirza, M.D., 3511 Mary Street, Endwell, New York 13760. Dow Medical College (Pakistan) 1967. Special interest, general and vascular surgery. Group, partnership, solo. Available.

UROLOGY—Steven L. Sholem, M.D., P.O. Box 335, 1061 Segovia Drive East, Litchfield Park, Arizona 85340. Columbia 1969. Board eligible. Associate or solo. Available July 1977.

H. Barry Opell, 1275 East 51st Street, Brooklyn, New York 11234. Lausanne (Switzerland) 1971. Board eligible. Partnership, solo, group. Available.

Hazem El-Droubi, 265-C Hackett Boulevard, Albany, New York 12208. Ain-Shams University 1969. Board eligible. Group or partnership. Available July 1977.

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1. Please provide me with information concerning LAAM?

Methadyl acetate (Levo-alpha-acetyl methadol—LAAM), a synthetic congener of methadone, is under investigation by Merck Sharp & Dohme in the United States for possible use in treating narcotic addicts. Compared to methadone, which must be taken every 24 hours to avoid withdrawal symptoms, LAAM has a longer duration of action. Although initially it may be advantageous to have a patient visit the clinic daily to receive methadone, later it may become inconvenient and increase the risk of non-compliance or cause other problems. It is claimed also that LAAM produces milder withdrawal symptoms than methadone. Thus, its longer duration of action coupled with the possibility of milder withdrawal symptoms may make LAAM a useful substitute for methadone in treating narcotic addicts.¹

Jaffe and his associates in a number of studies^{1,2,3} compared the effects of LAAM and methadone in 65 compulsive heroin users. The authors found that there was no difference in social adjustments between patients who were maintained on daily methadone regimens and those given LAAM three times a week, thus suggesting the potential use of LAAM as a substitute for methadone in treating opiate dependence.

Senay *et al.*⁴ conducted a study comparing methadone and LAAM in the treatment of heroin addiction. One hundred and ninety-three addicts participated in a 14-week open clinical trial. Ninety-seven patients were randomly assigned to a LAAM clinic, in which LAAM was dispensed three times per week. Ninety-six patients were assigned to a methadone clinic in which methadone was dispensed six days per week. The authors observed that under open conditions LAAM and methadone were equivalent in rehabilitative efficacy in the treatment of opioid dependence.

In conclusion, it appears that LAAM and methadone compare favorably as far as social adjustments and other

rehabilitative efficacy are concerned. Since LAAM needs to be administered only three times a week, it could be a suitable alternative to methadone in the treatment of narcotic dependence, provided its long-term use is proved safe.

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3. Jaffe JH, *et al*: Methadyl acetate vs. methadone—A double-blind study in heroin users. *JAMA* 222:437-442 (Oct) 1972.
4. Senay EC, *et al*: Methadyl acetate and methadone: An open comparison. *JAMA* 237:138-142 (Jan) 1977.

2. What is the status of the use of phenobarbital to prevent febrile convulsions?

Febrile convulsions are one of the most common neurological problems of early childhood. It is estimated that three to six percent of all American children between the ages of six months and five years have febrile seizures.¹ The management of this situation includes treating the acute phase and possibly using prophylactic medication for preventing subsequent episodes.

The acute phase requires prompt emergency measures for controlling convulsions and fever. The recent literature supports the use of IV diazepam (Valium®), for treating convulsions in a dose of 0.2 to 0.3 mg per kg body weight (up to 5 mg for children under five years of age and up to 10 mg for children under 10 years of age). If intravenous injection is impracticable, diazepam is almost as effective if given intramuscularly in similar doses.^{1,2}

Phenobarbital, three to six mg per kg, given IV or IM, is used as an alternative to diazepam.¹ However, it has a slower onset of action and may produce greater respiratory depression than diazepam.

Phenobarbital administered orally sometimes is prescribed at the onset of fever for preventing convulsions. This is considered illogical as effective serum levels of the drug will not be achieved during short-term therapy. (Oral phenobarbital requires three to four weeks of therapy to achieve steady-state plasma concentrations.) However, after an IV or IM loading dose of phenobarbital (5 mg per kg IV or IM) oral phenobarbital in a dosage range of three to six mg per kg per 24 hours may be given until the child is afebrile.³

Regarding the role of phenobarbital for long-term prophylaxis against febrile convulsions, there have been conflicting reports. In one study, it was shown that phenobarbital was effective provided serum level was maintained above 15 mcg/ml.² However, Heckmatt *et al.*⁴ reported that prophylactic phenobarbital does not seem to prevent febrile convulsions. They studied 161 children who presented with their first febrile convulsions between the ages of six months and three years. Eighty-eight children assigned to

*The Schwartz Inter-National Pharmaceutic and Therapeutic Drug Information Center of the Brooklyn College of Pharmacy, Long Island University, compiles the information contained in this column each month. The Center serves as a source of intelligence on therapeutic and pharmaceutical information not readily available to physicians, at no charge to them, and provides this information with minimal time involvement. It is staffed by trained pharmacists; Jack M. Rosenberg, Pharm. D., Associate Professor and Chairman, Division of Clinical Pharmacy, Brooklyn College of Pharmacy, is Director and Walter Modell, M.D., Emeritus Professor of Pharmacology at Cornell University Medical College, is pharmacologist consultant. The service is available Monday through Friday from 9 a.m. to 4:30 p.m.—telephone (212) 622-8989 or 303-2735. The following are questions and answers handled by the Center recently.

This month's column was prepared by J. M. Rosenberg, M.S., Pharm. D., M. K. Raina, M. Pharm., Ph.D., P. Sangkachand, B.S., Brooklyn College of Pharmacy, LIU.

a treatment group received phenobarbital at dosages sufficient to maintain plasma concentrations of 16 mcg/ml. The other 73 served as controls. In the treated group 10 out of 88 children had repeat convulsions, whereas in the control group 14 out of 73 had convulsions. This difference was not significant. In the treated group, 39 children stopped medication for a variety of reasons including overactivity, unpleasant behavior, and so on. Of the 49 children who took the drug regularly for six months, four children had repeat convulsions, though all four had phenobarbital serum levels considered to be effective.

In conclusion, the drug of choice for acute febrile convulsions is diazepam administered intravenously or intramuscularly. Phenobarbital administered orally at the onset of fever, without an IV or IM loading dose, may be illogical; its value as a long-term prophylactic agent has not been established.

References

1. Hartman AW: Febrile convulsions and their treatment with drugs. *Lippincott's Hosp Phar* 11:99-103 (Mar) 1976.
2. Wallace SJ: Febrile fits. *Br Med J* 1:333-334 (Feb) 1976.
3. Prichard JS: Convulsive disorders in children—Some notes on diagnosis and treatment. *Pediatr Clin Am* 21:2 (Nov) 1974.
4. Heckmatt JZ, et al: Failure of phenobarbitone to prevent febrile convulsions. *Br Med J* 1:559-561 (Mar) 1976.

3. Could you supply information on the use of levodopa in the treatment of psoriasis?

Psoriasis is an inflammatory skin disorder accompanied with rapid proliferation of a number of cell types. At present there is no known cure for this disease, and all treatment programs are palliative.

Topically coal tar solutions, anthralin ointments, irradiation with ultra-violet light, and topical corticosteroids have helped to clear skin lesions.¹ Systemically methotrexate, a drug which interferes with cell replication, presently is being used in severe forms of the disease which do not respond to other forms of therapy.²

Recently levodopa (Bendopa; Larodopa®; Dopar®) has been used in the treatment of psoriasis. Barbeau³ and Giroux⁴ independently both reported that in a few patients with parkinsonism, levodopa improved accompanying psoriasis after three to four months of treatment. The beneficial effects of levodopa have been attributed to its ability to increase the output of cyclic adenosine^{3,5} monophosphate (CAMP), a deficiency of which has been found

in psoriatic epidermis.⁴

Savery et al.⁵ in a double-blind, crossover study compared the effectiveness of levodopa with placebo in forty patients who had typical plaque-type psoriasis of more than three months duration. Patients were randomly divided into a treatment group (Group A; 20 patients) and placebo group (Group B; 20 patients). The treatment group received 500 mg of levodopa twice daily. The study was conducted for six months and crossover occurred at three months. In both groups, patients additionally received topical emollients. Observations included color photographs of the lesions and determination of CAMP levels of skin biopsies before and after the course of treatment. At the end of six weeks of treatment, all twenty patients from Group A showed relief from pruritus and plaque. Six of these patients showed normal skin formation without relapse even during the subsequent placebo period.

In Group B, no improvement was observed in ten patients until they were crossed over from placebo to levodopa. Two patients of this B-Group showed no improvement and the eight were unable to tolerate levodopa, hence, dropped from the study. The patients who showed improvement while on levodopa displayed an increase of CAMP, whereas no change in CAMP was observed in patients with no improvement. The authors concluded that levodopa administration resulted in beneficial effects with improvements in skin biopsies.

Niinimäki,⁶ however, found no therapeutic effect on psoriatic lesions in 11 patients treated with two to four grams of levodopa orally every day for up to eight weeks.

In conclusion, the value of levodopa in the treatment of psoriasis is still unknown.

References

1. McDonald CJ: *Psoriasis, Current Therapy*, edited by Comm HF. Philadelphia, Saunders, 1976, p 654-658.
2. Anon.: *Physician's Desk Reference*. Oradell, New Jersey, Medical Economics Company, 1977, p 907.
3. Barbeau A and Giroux JM: Levodopa and psoriasis. *Lancet* 1:204-205 (Jan) 1972.
4. Giroux JM et al: Levodopa and Ro 4-4602 in psoriasis. *Lancet* 8:333-334 (Aug) 1972.
5. Savery F, et al: A comparative evaluation of the anti-psoriatic effect of L-dopa versus placebo in psoriasis. *Curr Ther Res* 20:130-133 (Aug) 1976.
6. Niinimäki A: Levodopa and psoriasis. *Ann Clin Med* 7:278-279, 1975.

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ANNOUNCEMENTS

Regional Chest Conference

On June 2, from 4 to 6 p.m., at Rutgers Medical School, Piscataway, the Central New Jersey Regional Chest Conference will convene. Sponsors are the New Jersey Thoracic Society and the Delaware-Raritan Lung Association. Topic is "Studies on the Etiology of Acute Infectious Lower Respiratory Tract Bronchitis in Patients with Chronic Pulmonary Disease" and the scheduled speaker is Gladys L. Hobby, Ph.D., Chief, Research Laboratory for the Study of Chronic Infectious Diseases, Veterans Administration Hospital, East Orange. The program has been approved for two credit hours in Category I of the AMA.

General Medical Review

From June 5 to 11, the Program of Continuing Education of the University of Maryland School of Medicine in Baltimore will present a comprehensive symposium designed to review current medical concepts for primary care physicians. Topics to be covered include infectious diseases, cerebrovascular disease, psychiatric aspects of medical practice, behavioral pediatrics, breast cancer, endocrine disorders, and rheumatology. Optional sessions also are available in family practice, dermatology, and endocrinology. Additional information is available from the school, 655 West Baltimore Street, Room 14-016, Baltimore, Maryland 21201.



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Medical Expedition to Northwest Nepal

The Department of International Health, The Johns Hopkins University School of Hygiene and Public Health, and The Woodlands Institute in Cherry Grove, West Virginia, are co-sponsoring a five-week medical training expedition to the Limi Valley of northwest Nepal—from September 21 to October 26. Objectives are to survey health conditions, nutrition, environmental influences, and indigenous health practices, and to provide simple health care. Physicians will provide transitory medical services and conduct health research. Spouses and persons with other special interests such as anthropology are welcome. The course has been approved for 100 credit hours in Category I of the AMA Physician's Recognition Award. Fee is \$4,585. For additional information please communicate with Dr. Carl Taylor, Room 5039, School of Hygiene and Public Health, 615 North Wolfe Street, Baltimore, Maryland 21205.

Medical Women's Association Officers

The New Jersey Medical Women's Association, a branch of the American Medical Women's Association, announced the election of the following new officers. Past-President is Barbara Salamone, M.D., of Clifton.

President — Marie R. Badaracco, M.D., Upper Montclair
President-Elect — Anna Seebode, M.D., Cedar Grove
1st Vice President — Coralyn Flad, M.D., Edison
2nd Vice President — Roberta Rubin, M.D., Montclair
Treasurer — Eva Adler, M.D., Haworth
Recording Secretary — Suzanne Widrow, M.D., Hanover
Corr. Secretary — Barbara McCormack, M.D., Tenafly

Camp for Diabetic Children

Camp Nejeda, fully approved by the American Camping Association, is owned and operated by the Camp Nejeda Foundation under the sponsorship of the American Diabetes Association, New Jersey Affiliate, Inc. It provides a healthful, coordinated educational camping experience to children 5-15 years of age with diabetes. The weekly fee is \$110 but no child will be denied acceptance because of insufficient funds.

Located in Stillwater, on a 70-acre tract surrounding a spring-fed 13-acre lake, the Camp's facilities include a handsome new multipurpose lodge, a large arts and crafts center, a modern health center continuously and fully staffed professionally, nine new cabins, nine rustic cabins, a swimming pool, baseball diamond, basketball court, volley ball court, archery range, canoes, rowboats, and kayaks.

For the 1976 season, we had 145 campers (plus a staff of 40)—more than ever, at a time when other camps are showing declining enrollment. Of these campers, 20 percent were unable to pay any fee. Our operating budget was in the range of \$70,000, with camper tuitions supplying approximately 30 percent of this amount. Our \$40,000 deficit must be met with *outside* help. Contributions are, of course, fully tax deductible.

Inquiries should be directed to Mrs. Wm. Levison, Executive Director, Camp Nejeda Foundation, 153 Roseville Avenue, Newark 07107.

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MEETINGS OF MEDICAL INTEREST

This listing is compiled through the cooperation of the Committee on Medical Education of The Medical Society of New Jersey, the Academy of Medicine of New Jersey, the New Jersey Chapter of the American Academy of Family Physicians, and the Office of Continuing Medical Education of the College of Medicine and Dentistry of New Jersey. For information on accreditation, please contact the sponsoring organization(s), indicated by italics — last line of each item.

May

- | | |
|---|---|
| <p>16 Basic Science for Surgeons
 23 3-4 p.m. — Martland Hospital, Newark
 <i>(Sponsored by N.J. Medical School and AMNJ)</i></p> <p>16 Scientific Session — Section on Family Practice
 9 a.m.-4 p.m. — Haddon Hall, Atlantic City
 <i>(Sponsored by MSNJ and N.J. AAFP)</i></p> <p>16 Diagnosis and Management of Non-Hodgkins Lymphoma
 12 noon-1 p.m. — Overlook Hospital, Summit
 <i>(Sponsored by Overlook Hospital and AMNJ)</i></p> <p>17 Tuberculosis
 12 noon — St. Mary's Hospital, Orange
 <i>(Sponsored by AMNJ and AAFP)</i></p> <p>17 Chronic Hepatidities
 24 8-9 a.m. — Paterson General Hospital
 31 <i>(Sponsored by Paterson General Hospital and AMNJ)</i></p> | <p>18 New Concepts and Review of Internal Medicine
 1-3 p.m. — Bayonne Hospital
 <i>(Sponsored by CMDNJ and AMNJ)</i></p> <p>18 Rheumatology
 25 9-10:30 a.m. — West Jersey Hospital, Voorhees
 <i>(Sponsored by West Jersey Hospital and AAFP)</i></p> <p>18 Continuing Medical Education Program
 25 10:30-11:30 a.m. — Clara Maass Memorial Hospital, Belleville
 <i>(Sponsored by Clara Maass Mem. Hosp. and AAFP)</i></p> <p>18 Rahway Hospital CME
 25 11:30 a.m. — Rahway Hospital, Rahway
 <i>(Sponsored by Rahway Hospital and AAFP)</i></p> <p>18 Grand Rounds in Obstetrics and Gynecology
 25 2-4 p.m. — New Jersey Medical School, Newark
 <i>(Sponsored by CMDNJ and AMNJ)</i></p> |
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- 18 **Role of the Therapist in Psychotherapy**
1-2:30 p.m. — Marlboro Psychiatric Hospital
(Sponsored by Marlboro Psychiatric Hospital and AMNJ)
- 18 **Allergy and Immunology**
25 7:30-8:30 a.m. — Alexian Brothers Hospital, Elizabeth
(Sponsored by Alexian Brothers Hospital and AAFP)
- 18 **Anatomy for Surgeons**
25 4 p.m.-9 p.m. — Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)
- 18 **Cardiology Conferences**
4-6 p.m. — Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)
- 18 **Suicide: The Savage God**
1-2 p.m. — VA Hospital, Lyons
(Sponsored by VA Hospital and AMNJ)
- 18 **Common Medical Problems**
25 **Common Radiologic Problems for Family Physicians**
8-9 a.m. — So. Ocean County Hospital, Manahawkin
(Sponsored by Burlington County Memorial Hospital and AAFP)
- 18 **Special Rounds, General Surgery and Specialties**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 18 **Pharmacology of Sleep**
1-2:30 p.m. — N.J. Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 18 **Rational Dosage of Neuroleptics**
3:15-4:45 p.m. — Fair Oaks Hospital, Summit
(Sponsored by Fair Oaks Hospital and AMNJ)
- 18 **Disorders of Sleep/Wakefulness States**
3-5 p.m. — New Jersey Medical School, Newark
(Sponsored by CMDNJ, AAFP, AMNJ)
- 19 **Outpatient Management of Pulmonary Tuberculosis**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 19 **Cellular Engineering in Medicine**
5-6:30 p.m. — Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
- 19 **Postgraduate Symposia in Surgery**
7:30-8:30 a.m. — West Jersey Hospital, Voorhees
(Sponsored by West Jersey Hospital, University of Pennsylvania and AAFP)
- 19 **Marriage: Myth and Reality**
8:30-10:30 p.m. — Hackensack Hospital
(Sponsored by N.J. Psychoanalytic Society and AMNJ)
- 19 **Medical Grand Rounds**
26 9-10 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 19 **Neurosurgical Conferences**
26 4-5 p.m. — VA Hospital, East Orange
(Sponsored by CMDNJ, VA Hospital, East Orange, and AMNJ)
- 19 **Elizabeth Tri-Hospital Hematology Conferences**
8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 19 **Basic Sciences and Clinical Applications**
3:30 p.m. — Burlington County Memorial Hospital, Mount Holly
(Sponsored by Burlington County Memorial Hospital and AAFP)
- 19 **The Mentally Ill Physician**
8-10 p.m. — 19 Anton Court, Woodcliff Lake
(Sponsored by A.M.W.A., Bergen County Chapter and AMNJ)
- 19 **Forensic Psychiatry and Private Practice**
12 noon — Carrier Clinic, Belle Mead
(Sponsored by Carrier Clinic)
- 20 **Duodenal-Pancreatic Catheterization**
9-10 a.m. — St. Francis Hospital, Trenton
(Sponsored by Hahnemann Medical College and AAFP)
- 20 **Cardiology Conferences**
27 7:30-8:30 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 20 **Diabetes**
12 noon — Freehold Area Hospital
(Sponsored by AMNJ and AAFP)
- 21 **Advances in Orthopedic Surgery**
10 a.m.-12 noon — N.J. Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 24 **Thanatology**
12 noon — Hospital Center at Orange
(Sponsored by AMNJ and AAFP)
- 24 **Obesity, Prevention and Control**
12 noon — West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
- 24 **Secretory Immunoglobulins in Diagnosis of GI Carcinoma**
8-10 p.m. — Englewood Mens' Club
(Sponsored by the Englewood Surgical Society)
- 24 **Bleeding Diseases**
8 p.m. — Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
- 25 **Proper Use of Blood Gases**
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)

- 25 Headache**
9-11 a.m. — Middlesex General Hospital
(Sponsored by Middlesex General Hospital and AAFP)
- 25 Special Rounds, Internal Medicine**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 25 Pneumonia: Viral and Bacterial**
10:30-12 noon — Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
- 25 Behavioral Therapy and Psychopharmacology**
3:15-4:45 — Fair Oaks Hospital, Summit
(Sponsored by Fair Oaks Hospital and AMNJ)
- 25 Psychiatric Differential Diagnosis**
1:30-3:30 p.m. — Christ Hospital, Jersey City
(Sponsored by Christ Hospital and AAFP)
- 25 Hepatitis: Update 1977**
1-2 p.m. — Auditorium, Bldg. 5, VA Hospital, Lyons
(Sponsored by VA Hospital and AMNJ)
- 26 Orthopedic Seminar**
12 noon-1:00 p.m. — St. Mary's Hospital, Orange
(Sponsored by St. Mary's Hospital and AMNJ)
- 26 Elizabeth Tri-Hospital Endocrine Conferences**
8-9 p.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 12 Management of Diabetes**
- 26 Hyperalimentation**
10:30 a.m. — Monmouth Medical Center
(Sponsored by Monmouth Medical Center and AAFP)
- 26 Human Territoriality**
12 noon — Carrier Clinic, Belle Mead
(Sponsored by Carrier Clinic)
- 26 Pediatric Pulmonary Conference and Case Presentations**
11 a.m.-12 noon — United Hospitals of Newark
(Sponsored by Children's Hospital of Newark and CMDNJ)
- 26 Preventive Measures in Heart Disease**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 28 Advances in Orthopedic Surgery**
8:30-10:30 a.m. — N.J. Medical School, Newark
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June

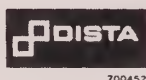
- 1 **Tuberculosis – Outpatient Treatment**
1 p.m. – Christ Hospital, Jersey City
(Sponsored by AMNJ and AAFP)
- 1 **Update on Psychoactive Medication**
1-2 p.m. – VA Hospital, Lyons
(Sponsored by VA Hospital and AMNJ)
- 1 **Special Rounds, Pathology**
10:30 a.m.-12 noon – St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 1 **Anatomy for Surgeons**
4-9 p.m. – Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)
- 1 **Distinguished Lectures in Ob/Gyn**
8-9 p.m. – The Carriage Trade, East Orange
(Sponsored by CMDNJ and AMNJ)
- 1 **Continuing Medical Education Series**
10:30-11:30 a.m. – Clara Maass Memorial Hospital, Belleville
(Sponsored by Clara Maass Mem. Hosp. and AAFP)
- 1 **Emergency Medical Care Seminars**
8 9 a.m.-4 p.m. – Monmouth Medical Center, Long Branch and St. Elizabeth Hospital, Elizabeth
(Sponsored by Inter-Agency Commission on Emergency Medical Care, MSNJ and AMNJ)
- 1 **Rheumatology**
8 9-10:30 a.m. – West Jersey Hospital, Voorhees
15 (Sponsored by West Jersey Hospital and AAFP)
22
- 1 **Continuing Medical Education Program**
8 11:30 a.m. – Rahway Hospital, Rahway
15 (Sponsored by Rahway Hospital and AAFP)
- 1 **Allergy and Immunology**
8 7:30-8:30 a.m. – Alexian Brothers Hospital, Elizabeth
15 (Sponsored by Alexian Brothers Hospital and AAFP)
22
- 2 **Reducing Suicidal Risk in Depression**
9 **Psychiatry**
16 **Regressive Behavior in Prisons**
23 **Fiberoptic Colonoscopy**
30 **Sleep Disorders**
12 noon – Carrier Clinic, Belle Mead
(Sponsored by Carrier Clinic)
- 2 **Medical Grand Rounds**
9 9-10 a.m. – St. Elizabeth Hospital, Elizabeth
16 (Sponsored by St. Elizabeth Hospital and AAFP)
23
30
- 2 **Advanced Psychiatric Study Group**
8-10 p.m. – 312 Harding Drive, South Orange
(Sponsored by Group for Advanced Psychiatric Study and AMNJ)
- 2 **Elizabeth Tri-Hospital Hematology Conferences**
16 8-9 a.m. – St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)
- 2 **Neurosurgical Conferences**
9 4-5 p.m. – VA Hospital, East Orange
16 (Sponsored by CMDNJ, VA Hospital, East Orange,
23 and AMNJ)
30
- 2 **Pulmonary Function Tests**
11:45 a.m.-12:45 p.m. – Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
- 2 **Central N.J. Regional Chest Conference**
4-6 p.m. – Rutgers Medical School, Piscataway
(Sponsored by New Jersey Thoracic Society and AMNJ)
- 2 **Behavior Modification Seminar and Workshop**
16 1:30-3:30 p.m. – Trenton Psychiatric Hospital
23 (Sponsored by Trenton Psychiatric Hospital and
30 AMNJ)
- 3 **Psychiatry-Medical Surgical Emergencies**
8:30 a.m. – United Hospitals of Newark
(Sponsored by AMNJ and AAFP)
- 3 **Cardiology Conferences**
10 7:30-8:30 a.m. – St. Elizabeth Hospital, Elizabeth
17 (Sponsored by St. Elizabeth Hospital and AAFP)
24
- 4 **Advances in Orthopedic Surgery**
11 8:30-10:30 a.m. – N.J. Medical School, Newark
18 10 a.m.-12 noon – (Third Saturday Only)
25 (Sponsored by CMDNJ and AMNJ)
- 26 **Non-Specific Urethritis**
8 p.m. – Community Memorial Hospital, Toms River
(Sponsored by AMNJ and AAFP)
- 6 **An Enuretic Girl**
8-10 p.m. – 9 Marquette Road, Upper Montclair
(Sponsored by Essex Psychiatry Seminar and AMNJ)
- 7 **Chronic Hepatidities**
14 8-9 a.m. – Paterson General Hospital
(Sponsored by Paterson General Hospital and AMNJ)
- 7 **Biology of Surgical Infection**
5-6 p.m. – Rutgers Medical School, Piscataway
(Sponsored by CMDNJ and AMNJ)
- 7 **Arthritis**
11 a.m. – Greystone Park Psychiatric Hospital
(Sponsored by AMNJ and AAFP)
- 7 **Fourth Annual Scientific Session – Abstracts**
St. Barnabas Medical Center, Livingston
(Sponsored by Nephrology Society of N.J. and AMNJ)
- 8 **Hematologic Reactions to Drugs**
1-2 p.m. – VA Hospital, Lyons
(Sponsored by VA Hospital and AMNJ)

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| <p>8 Special Rounds, Pediatrics
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)</p> <p>8 Understanding Psychiatric Problems
3:15-4:45 p.m.—Fair Oaks Hospital, Summit
(Sponsored by Fair Oaks Hospital and AMNJ)</p> <p>8 Endotoxic Shock
1:30-3 p.m.—St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)</p> <p>8 Management of Arrhythmias
10:30-12 noon—Passaic General Hospital
(Hahemann Medical College and AAFP)</p> <p>8 Annual Meeting New Jersey Thoracic Society
9:30-3:30 p.m.—Rutgers Medical School, Piscataway
(Sponsored by New Jersey Thoracic Society and AMNJ)</p> <p>8 Hyperkinetic Syndrome of Childhood</p> <p>15 Modern Aspect of Drug Abuse</p> <p>22 Psychopharmacology and Psychiatric Disorders</p> <p>29 Forensic Psychiatry
1:30-3:30 p.m.—Christ Hospital, Jersey City
(Sponsored by Christ Hospital and AAFP)</p> | <p>8 Evolution of the State Hospital Psychiatrist
1-2:30 p.m.—Marlboro Psychiatric Hospital
(Sponsored by Marlboro Psychiatric Hospital and AMNJ)</p> <p>9 Proper Use of Blood Gas
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)</p> <p>9 Elizabeth Tri-Hospital Endocrine Conferences</p> <p>23 8-9 a.m.—St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)</p> <p>14 Chronic Pancreatic Disease
12 noon—West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)</p> <p>14 Endocrine Changes in Menopause
11:45 a.m.-12:45 p.m.—Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)</p> <p>14 Pacemakers
8 p.m.—Paul Kimball Hospital, Lakewood
(Sponsored by AMNJ and AAFP)</p> |
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- 14 **Allergy**
9 p.m. — Bayonne Hospital
(Sponsored by AMNJ and AAFP)
 - 14 **Advances in Obstetrical Ultrasound**
7:30-9:30 p.m. — East Orange General Hospital
(Sponsored by N.J. Institute of Ultrasound in Medicine and AMNJ)
 - 14 **Comprehensive Course on the Vitreous and**
28 **Vitreous Surgery**
4:30-5:30 p.m. — United Hospitals Medical Center, Newark
(Sponsored by Associated Eye Residencies of N.J. and AMNJ)
 - 15 **Use and Abuse of Steroid Therapy**
1-2 p.m. — VA Hospital, Lyons
(Sponsored by VA Hospital and AMNJ)
 - 15 **Adult Respiratory Distress Syndrome**
11:30 a.m.-12:30 p.m. — VA Hospital, East Orange
(Sponsored by East Orange VA Hospital)
 - 15 **Special Rounds, General Surgery and Specialties**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
 - 15 **Transcultural Psychiatry**
1-2:30 p.m. — New Jersey Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
 - 15 **Common Medical Problems**
 - 22 **Radiologic Problems for Family Physicians**
8-9 a.m. — So. Ocean County Hospital, Manahawkin
(Sponsored by Burlington County Memorial Hospital and AAFP)
 - 16 **Postgraduate Symposia in Surgery**
7:30-8:30 a.m. — West Jersey Hospital, Voorhees
(Sponsored by West Jersey Hospital, University of Pennsylvania and AAFP)
 - 16 **Duodenal Ulcer Disease**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
 - 16 **Current Concepts of Addiction**
5-6:30 p.m. — Somerset Hospital, Somerville
(Sponsored by Somerset Hospital)
 - 17 **Thyroid Diseases**
12 noon — Freehold Area Hospital
(Sponsored by AMNJ and AAFP)
 - 20 **Status Asthmaticus**
10 a.m. — Monmouth Medical Center
(Sponsored by AMNJ and AAFP)
 - 21 **Hypertension**
12 noon — St. Mary's Hospital, Orange
(Sponsored by AMNJ and AAFP)
 - 22 **Arterial Blood Gases**
10:30-12 noon — Passaic General Hospital
(Sponsored by Hahnemann Medical College and AAFP)
 - 22 **Geriatric Psychiatry**
1-2 p.m. — VA Hospital, Lyons
(Sponsored by VA Hospital and AMNJ)
 - 22 **CAT-Scan in Evaluation of Cancer**
12 noon-1 p.m. — Englewood Hospital
(Sponsored by Englewood Hospital and AMNJ)
 - 22 **Hemorrhagic Shock**
1:30-3 p.m. — St. Mary's Hospital, Passaic
(Sponsored by AMNJ and AAFP)
 - 22 **Special Rounds, Internal Medicine**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
 - 23 **Psychosomia — A Medical Diagnosis**
11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)
 - 23 **New Advances in Ophthalmic Surgery**
5:30-6:30 p.m. — St. Mary's Hospital, Orange
(Sponsored by St. Mary's Hospital and AMNJ)
 - 28 **Outpatient Management of Tuberculosis**
8 p.m. — Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)
 - 28 **Treatment of Rheumatoid Arthritis**
12 noon — West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)
 - 28 **Dysentery in India**
8-10 p.m. — Englewood Mens' Club, Englewood
(Sponsored by Englewood Surgical Society and AMNJ)
 - 29 **Cardiac Complications of Alcoholism**
1-2 p.m. — VA Hospital, Lyons
(Sponsored by VA Hospital and AMNJ)
- July
- 7 **Behavior Modification Seminar and Workshop**
1:30-3:30 p.m. — Trenton Psychiatric Hospital
(Sponsored by Trenton Psychiatric Hospital and AMNJ)
 - 14 **Controlled Drinking**
12 noon — Carrier Clinic, Belle Mead
(Sponsored by Carrier Clinic)
 - 21 **Endotracheal Intubation and CPR**
12 noon — Carrier Clinic, Belle Mead
(Sponsored by Carrier Clinic)



The Old Youth Correctional Institution of Bordentown — Photo by N. J. Palokow 2/76

**For your patients with osteoarthritis,
the recommended initial dosage* is**

1 Pulvule® q.i.d.

*The dosage may be adjusted in accordance with the patient's condition and changes in disease activity.

The most common type of adverse reaction reported concerned the gastrointestinal system.

Dyspepsia occurred most frequently; it was observed in about one of seven patients.



700452

Nalfon®
fenoprofen calcium

Please see last page of advertisement for summary of prescribing information



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fenoprofen calcium

Indications and Usage: Nalfon is indicated for relief of the signs and symptoms of rheumatoid arthritis and osteoarthritis. It is indicated in the treatment of acute flares and exacerbations and in the long-term management of these diseases. The safety and effectiveness of Nalfon have not been established in those rheumatoid arthritis patients who are designated by the American Rheumatism Association as Functional Class IV (largely or wholly incapacitated with patient bedridden or confined to wheelchair, permitting little or no self-care).

Contraindications: Nalfon is contraindicated in patients who have shown hypersensitivity to it.

Because the potential exists for cross-sensitivity to aspirin and other non-steroidal, anti-inflammatory drugs, Nalfon should not be given to patients in whom aspirin and other nonsteroidal, anti-inflammatory drugs induce the symptoms of asthma, rhinitis, or urticaria.

Warnings: Nalfon should be given under close supervision to patients with a history of upper-gastrointestinal-tract disease and only after the Adverse Reactions section has been consulted. Gastrointestinal bleeding, sometimes severe, has been reported in patients receiving Nalfon.

In patients with active rheumatoid arthritis or osteoarthritis who also have an active peptic ulcer, attempts should be made to treat the arthritis with nonulcerogenic drugs. If Nalfon must be given, the patient should be under close supervision for signs of ulcer perforation or severe gastrointestinal bleeding.

In subacute and chronic studies in rats, Nalfon caused interstitial nephritis, glomerulonephritis, and renal papillary necrosis. These abnormalities were dose related and began to appear at doses approximating the human dose. In chronic studies in monkeys, interstitial nephritis also occurred following administration of Nalfon. Although this was seen at doses considerably above the human dose, lower doses were not studied in this species. During the course of the clinical trials, one patient developed bilateral suppurative pyelonephritis, underwent laparotomy, went on to renal failure, and died with a diagnosis of septicemia and renal papillary necrosis. It is not known whether these events were drug related. A few patients developed mild elevations of the BUN during therapy with Nalfon. Since Nalfon is eliminated primarily by the kidney, the drug should not be administered to patients with significantly impaired renal function. It is desirable to perform periodic renal function tests in all patients receiving Nalfon.

Precautions: In chronic studies in rats, high doses of Nalfon caused elevation of serum transaminase and hepatocellular hypertrophy. In clinical trials, some patients developed elevation of serum transaminase, LDH, and alkaline phosphatase which persisted for some months and usually, but not always, declined despite continuation of the drug. The significance of this is unknown. It is recommended that periodic liver function tests be performed in patients receiving Nalfon and that the drug be discontinued if abnormalities occur.

The safety of this drug in pregnancy and lactation has not been established, and its use during these events is, therefore, not recommended. Reproduction studies have been performed in rats and rabbits. When fenoprofen was given to rats during pregnancy and continued to the time of labor, parturition was prolonged. Similar results have been found with other nonsteroidal, anti-inflammatory drugs which inhibit prostaglandin synthetase.

In-vitro studies have shown that fenoprofen, because of its affinity for albumin, may displace from their binding sites other drugs which are also albumin bound, and this may lead to drug interaction. Theoretically, fenoprofen, as well as other nonsteroidal, anti-inflammatory agents, could likewise be displaced. Patients receiving hydantoin, sulfonamides, or sulfonylureas should be observed for signs of toxicity to these drugs. In patients receiving coumarin-type anticoagulants, the addition of Nalfon to therapy could prolong the prothrombin time. Patients receiving both drugs should be under careful observation.

In patients receiving Nalfon® (fenoprofen calcium, Dista) and steroid concomitantly, any reduction of steroid dose should be gradual to avoid the possible complications of sudden steroid withdrawal.

Patients with initial low hemoglobin values who are receiving long-term therapy with Nalfon should have a hemoglobin determination at reasonable intervals.

Peripheral edema has been observed in some patients taking Nalfon; therefore, Nalfon should be used with caution in patients with compromised cardiac function.

Studies to date have not shown changes in the eye attributed to administration of Nalfon. However, because of adverse eye findings in animal studies with some other nonsteroidal, anti-inflammatory drugs, it is recommended that ophthalmologic studies be carried out within a reasonable period of time after chronic therapy with Nalfon has been started and at periodic intervals thereafter.

Since food decreases the blood levels of Nalfon, the drug should be given thirty minutes before or two hours after meals during the daytime.

When phenobarbital, which may enhance the metabolism of Nalfon, is added or withdrawn, dosage adjustment of Nalfon may be required.

Caution should be exercised by patients whose activities require alertness if they experience central-nervous-system side-effects from Nalfon.

Since the safety of Nalfon in patients with impaired hearing has not been established, these patients should have periodic tests of auditory function during chronic therapy with Nalfon.

Nalfon decreases platelet aggregation and may prolong bleeding time. Patients who may be adversely affected by prolongation of the bleeding time should be carefully observed when Nalfon is administered.

Adverse Reactions: Digestive System—The most common type of adverse reaction concerned the gastrointestinal system. Dyspepsia occurred most frequently, being observed in about one out of seven patients. Other adverse reactions, in descending order of frequency, were constipation, nausea, vomiting, abdominal pain, anorexia, occult blood in the stool, diarrhea, flatulence, and dry mouth.

Three instances of peptic ulceration and/or gastrointestinal hemorrhage that may have been due to the drug and four instances in which drug relationship was questionable were observed in 3,391 individuals to whom the drug was administered for periods of time ranging up to 165 weeks.

In less than 2 percent of patients, the drug was discontinued because of adverse gastrointestinal reactions.

Skin and Appendages—The most common adverse effect was pruritus, which was seen in about one out of ten patients. Other adverse reactions were rash, increased sweating, and urticaria.

In about 1 percent of patients, Nalfon was discontinued because of an adverse effect related to the skin.

Nervous System—The most frequent adverse reaction observed was somnolence, which occurred in about one out of seven patients. Other adverse effects, which occurred less frequently, were dizziness, tremor, confusion, and insomnia.

Nalfon was discontinued in less than 0.2 percent of patients because of these side-effects.

Special Senses—The most common adverse reaction was tinnitus, which was seen in about one out of ten patients. Other reactions observed, in descending order of frequency, were blurred vision and decreased hearing.

In about 0.2 percent of patients, Nalfon was discontinued owing to adverse effects related to the special senses.

Cardiovascular—The most frequent adverse effect observed was palpitations. This was noted in about one out of twenty-five patients. Tachycardia was observed less frequently.

In less than 0.5 percent of patients, Nalfon was discontinued as a result of cardiovascular adverse reactions.

Laboratory—Anemia was noted in about one out of 500 patients. Therapy with Nalfon had to be discontinued in one patient because of anemia. Increase in alkaline phosphatase, LDH, and SGOT was observed (see Precautions).

Miscellaneous—Headache was seen in about one out of seven patients. Less frequently observed, in descending order of frequency, were nervousness, asthenia, dyspnea, peripheral edema, fatigue, malaise, and dysuria.

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Additional information available to the profession on request



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LETTER TO THE JOURNAL

Candidate for Governor

March 14, 1977

Dear Editor:

Even the most apathetic among us is aware that the noose is tightening. Bombarded by self-serving politicians, self-perpetuating bureaucrats, and self-righteous liberal press and media, we seem incapable of effective response.

The AMA *should* ask, "What has the AMA done for you *LATE*?"

MSNJ's "remedial legislation" package, which many of your readers patiently pinned their hopes on, was recently brought to a vote in the New Jersey State Senate. As I predicted, the negative bills were passed overwhelmingly, while those that would have returned fairness and reason to the current climate regarding malpractice were scuttled by the lawyer majority in the Senate as "giving the doctors an unfair advantage."

Unionization or "job-actions" are distasteful

to too many.

AMPAC and JEMPAC propose to buy or beg support of our position from our enemies, the major party politicians. State Senator Garriamore's recent con job is but one example of what we can expect. In his bid for the gubernatorial nomination, he boasts that *his* "Patients' Bill of Rights" will protect the people from the doctors, and keep them from being experimented upon.

There is still one positive avenue open to us:
ELECT OUR OWN GOVERNOR.

The New Jersey Libertarian Party has nominated me as their candidate for Governor. Most of your readers are familiar with my stand on the issues involved: opposition to governmental intrusion into health care provision, land use, education, energy, employment, environment, repeal of the income tax, and lowering or repeal of other taxes as the *need* for them is reduced.

I have been wished well by my most severe critics in the Hudson County Medical Society. I would like to appeal to all those who would do more than wish for a solution to help me now with the financing that must be raised to make my campaign effective.

(signed) Frank J. Primich, M.D.

OBITUARIES

Dr. Rizalino Atienza

One of Atlantic County's well-known anesthesiologists, Rizalino T. Atienza, M.D., died on March 10 in Pennsylvania Hospital, Philadelphia. A native of the Philippines, Dr. Atienza was graduated from the University of Santo Tomas Medical School in 1937 and came to the United States in 1948 to take fellowships in pediatrics and in chest diseases at King's County Hospital, Brooklyn. This was followed by a general residency at Caledonia Hospital

in Brooklyn, and a residency in anesthesiology at St. Claire's Hospital in New York. He accepted appointment as a staff member at Fordham Hospital in the Bronx until moving to Hammonton in 1964 where he was associated with the department of anesthesiology at the Kessler Memorial Hospital. Dr. Atienza was 67 years old at the time of his death.

Dr. Benjamin R. Blasi

Benjamin R. Blasi, M.D., of Irvington, died on March 22 at Martland Medical Center in Newark. Born in 1917 and graduated from George Washington University Medical

School, class of 1943, Dr. Blasi practiced family medicine in Essex County for many years. He was active in civic affairs and had been Newark school physician for twenty-five years. He had been a member of the American Academy of Family Practice and was affiliated with St. Michael's Medical Center in Newark.

Dr. S. Eugene Dalton

At the grand age of 83, S. Eugene Dalton, M.D., formerly of Atlantic County, died on February 4 in Provo, Utah, after a long illness. Dr. Dalton was graduated from Jefferson Medical College, class of 1924, and served his internship in Atlantic City Hospital. He went on to specialize in otolaryngology and bronchoesophagology, serving as chief of the latter at Atlantic City Hospital and at Shore Memorial Hospital. He was board certified in otolaryngology and was a Fellow of the American College of Surgeons and of the American College of Chest Physicians, and as recently as 1973 he was honored by installation as a member of the Royal Medical Society of Great Britain. He also was named in 1970 to the Wisdom Hall of Fame and is listed in *Who's Who in Science*. Dr. Dalton was active in medical society affairs, having served a term as president of the Atlantic County Medical Society (1958-1959), and on the state level as chairman of the Committee on Conservation of Hearing and Speech. He retired to Utah in 1969 and worked with the Research Committee on Air Pollution of Utah County and also with the Western Bronchoesophagological Society. Dr. Dalton was an inventor of several surgical instruments and had produced the first colored motion picture of the epipharynx and another motion picture of the pathophysiology of the tracheo-bronchial tree.

Dr. Vincent G. Fietti

Vincent G. Fietti, M.D., chief of the surgical division and a past-president of the medical staff at St. Mary's Hospital in Passaic, died there on February 12. Born in 1911 and graduated from New York University College of Medicine in 1938, Dr. Fietti pursued graduate

studies in surgery at New York Post Graduate Hospital and, after service with the department of medicine of the United States Army, established an office in Lyndhurst. In addition to his affiliation with St. Mary's, he had been associated with the Passaic General Hospital and was a Fellow of the International College of Surgeons. Dr. Fietti was active in community affairs and had served as school physician in Lyndhurst during the 1950s.

Dr. William G. Harris

We recently have learned of the death on January 19 of one of Gloucester County's senior members, William G. Harris, M.D., the father of William G. Harris, Jr., M.D., also a member of the Gloucester County Medical Society and a practicing physician in Mullica Hill. A native of North Carolina and a graduate of Tulane University Medical School, class of 1931, Dr. Harris took his internship and residency at Atlantic City Hospital and went on to practice general medicine in Gloucester County for many years. He was interested in county society affairs, having had a term as President of the Gloucester County Medical Society, and in the community's activities, serving as school physician for three townships in the county and as fire surgeon for his home area. Dr. Harris was 71 years old at the time of his death.

Dr. Sidney Keats

One of Newark's well-known orthopedic surgeons, Sidney Keats, M.D., died on February 10. Born in 1913 and graduated from New York University School of Medicine in 1938, Dr. Keats was a diplomate of the American Board of Orthopedic Surgery and a Fellow of the International College of Surgeons. He was affiliated with the New Jersey Orthopedic Hospital in Orange and St. Barnabas Medical Center in Livingston and had accepted appointment as assistant clinical professor in orthopedic surgery at the New Jersey Medical School. Dr. Keats was a member of the American Academy of Orthopedic Surgeons, the American Neurological Association, and the American Academy of Cerebral Palsy.

Dr. Herman Kline

On February 21, Herman Kline, M.D., a member of our Atlantic County component, died in New York Hospital. Born in 1902 and graduated from Hahnemann Medical College in 1926, Dr. Kline pursued a career in dermatology and had been chief of that department at the Atlantic City Hospital and was affiliated with the Betty Bacharach Home. An associate professor of dermatology at his alma mater, he was honored last year by Hahnemann on the fiftieth anniversary of his graduation. Dr. Kline was also a recipient of MSNJ's Golden Merit Award in 1976. He was the father of Dr. S. Ronald Kline of Margate, a practicing cardiologist at Atlantic City Medical Center.

Dr. David M. Levinson

We have just received word of the death on January 18 of David M. Levinson, M.D., who formerly practiced pediatrics in Newark. Dr. Levinson was graduated from Georgetown University School of Medicine in 1930 and, following internship and pediatric graduate study, came to Newark to establish an office. He was affiliated with Newark Beth Israel, Presbyterian, and Babies' Hospitals in Newark until retirement from private practice in 1970. For the next four years he served full time in the department of pediatrics at Newark Beth Israel Hospital.

Dr. Henry G. Marcarian

One of Camden County's senior members, Henry G. Marcarian, M.D., died on March 19 at Cooper Medical Center after a brief illness. Born in 1895 in Armenia, Dr. Marcarian emigrated to the United States as a small child and received his education here. His medical degree was earned at Temple University Medical School, class of 1926, and immediately upon completion of internship he came to Camden to establish a practice in general medicine. For thirty years he was examining physician for the U.S. Selective Service System. Dr. Marcarian was active in the Armenian Community. He had been chairman of the Armenian Cultural Society of Philadelphia

and was a member of the Armenian General Benevolent Union Knights of Vartan. In 1976 he was a recipient of MSNJ's Golden Merit Award, signifying fifty years of medical practice.

Dr. George H. C. McKeown

On February 23, George H. C. McKeown, M.D., a member of our Essex County component, died at his home in Norristown, Pennsylvania, where he had been living in retirement. A native of Philadelphia and a graduate of Hahnemann Medical College, class of 1934, Dr. McKeown was a researcher and administrator for several pharmaceutical houses, including many years with Merck, Sharp and Dohme. During World War II, he served with the U.S. Navy in the department of medicine. He was a member of the American Geriatrics Society, the American College of Chest Physicians, and the Association of Military Surgeons. Dr. McKeown was 69 years old at the time of his death.

Dr. Norman J. Meyers

At the untimely age of 43, Norman J. Meyers, M.D., a member of the Ocean County component, died on March 1 at Point Pleasant Hospital. Born in Perth Amboy and graduated from State University of New York, Downstate Medical Center, in 1959, Dr. Meyers took residencies in orthopedic surgery at St. Joseph's Hospital in Paterson and Children's Hospital in Milwaukee, becoming board certified in his specialty. He then served two years as Chief of Orthopedic Surgery at the Army facility at Fort Jackson, South Carolina. Dr. Meyers moved to Toms River in 1966 and maintained a practice there since that time. His hospital affiliations included Community in Toms River, Paul Kimball in Lakewood, and the Point Pleasant Hospital. He was active in the Jewish community and was chairman of the Jewish Appeal and of the Bonds for Israel campaign.

Dr. Alexander E. Nash

On March 3, Alexander E. Nash, M.D., an emeritus member from the Essex County Med-

ical Society, died at his home in Verona. A native of New York City, Dr. Nash received his doctorate in medicine from the University of Cincinnati in 1926 and pursued a career in endocrinology. He has been associated with the Mountainside Hospital in Montclair. Last year he received MSNJ's Golden Merit Award in recognition of fifty years of practice. Dr. Nash was 80 years old at the time of his death.

Dr. Charles D. Roberts

One of Bergen County's well-known internists, Charles D. Roberts, M.D., of Englewood Cliffs, died on March 9. A graduate of Harvard Medical College in 1935, Dr. Roberts was a diplomate of the American Board of Internal Medicine and a Fellow of the American College of Physicians. He had been chief and was still a member of the active staff in the department of

medicine at The Englewood Hospital. During World War II, Dr. Roberts served four years with the medical department of the U.S. Army. He was 68 years old at the time of his death.

Dr. Julius A. Toren

At the grand age of 95, Julius Arthur Toren, M.D., a member of our Monmouth County component, died on February 1. A graduate of the University of Illinois College of Medicine, class of 1907, Dr. Toren pursued the practice of pathology and had been associated with many hospitals throughout his career. In more recent years he had been pathologist for the Monmouth County Court House and also served as Monmouth County physician. He was a member of the New Jersey Society of Clinical Pathologists and the New Jersey Association of Medical Examiners.

BOOK REVIEWS

Viral Infections of Humans: Epidemiology and Control. A.S. Evons, Editor. New York, Plenum Publishing, 1977. Pp 584 Illustrated. (\$39.50)

This book does everything that it is titled to do, and more. Human viral infections are discussed from the standpoints of epidemiology to pathogenesis, to diagnosis, and to control. The material, contributed by thirty-five authorities, is complete and up to date.

The first two chapters cover, in depth, the principles of epidemiology, surveillance, seroepidemiology and host response; included is an excellent discussion of the collection, use, and interpretation of tests in viral disease. Individual viral infections are discussed in the remaining chapters, the last of which presents outstanding information on Burkitt's lymphoma, the epidemiology of cervical cancer, the chronic neurologic diseases, and nasopharyngeal cancer.

The text material is well-organized, accurate, and readable. The numerous chapter references are recent and authoritative. In addition, some chapters include references for "suggested reading."

The book is excellent and it is highly recommended to medical students, house-officers, all clinicians, and to those in the scientific area of medicine and dentistry. It was a delight to review this exceptional book.

Dominic A. Mauriello, M.D.

Current Medical Diagnosis and Treatment. 16th Revision. M.A. Krupp and M.J. Chotton. Los Altos, California, Lange, 1977. Pp 1066. (Softcover—\$16)

This up-dated desk reference to medical diagnosis and treatment performs as well as its predecessors. However, its dearth of illustrations, cardiograms, x-rays and the like necessitates a handy set of recent textbooks in the medical specialties. But, in the majority of instances in which one would use the book, this lack is more than compensated for by fairly complete albeit sketchy information and tabulations.

There are excellent chapters on poisoning, genetics and immunologic disorders, and the appendix contains medical recommendations for foreign travel, immunization schedules, normal values, conversion tables, techniques of cardiopulmonary resuscitation, and emergency treatment for food-choking.

Although this reviewer does not think it necessary to purchase each year's revision of the book, a fairly recent one is recommended.

Hyman W. Fisher, M.D.

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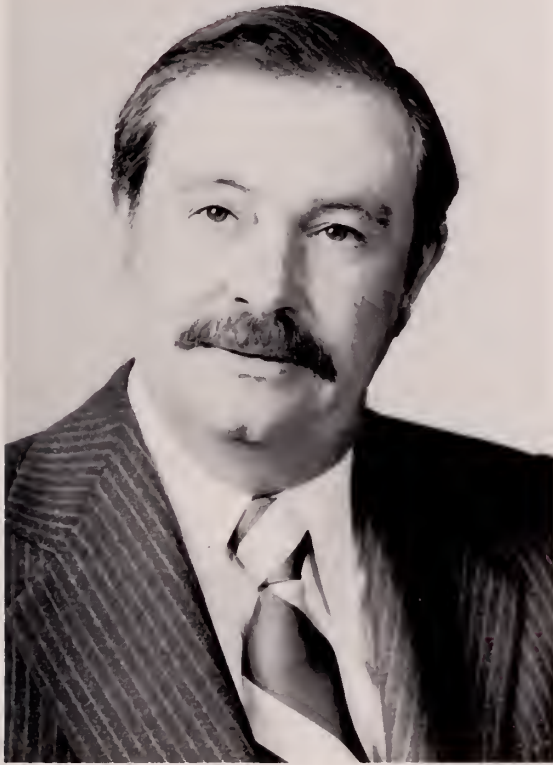


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EDITORIALS

Frank R. Begen, M.D.



The 185th President of The Medical Society of New Jersey, Frank R. Begen, comes from Bergen County. He was graduated from Princeton University and earned his degree in medicine at New York Medical College. He served an internship at Holy Name Hospital (Teaneck) and a residency in urology at St. Clare's Hospital, New York, and has practiced in Teaneck since 1955.

Among his honors and distinctions are a Bronze Star for action in Korea with the 25th Division of which he was battalion surgeon. He is a past-president of Bergen County Medical Society and has served as a trustee of The Medical Society of New Jersey.

Frank Begen is a diplomate of the American Board of Urology, a Fellow of the American College of Surgeons, and a member of the

Academy of Medicine of New Jersey. He is attending urologist at Riverside General Hospital in Secaucus, assistant chief of surgery at Bergen Pines County Hospital, Paramus, and a staff member at Holy Name Hospital in Teaneck.

Frank and his wife, the former Mari C. Shiller, have two children, Sean and Beth Ann. A.K.

Don't Be a Clam

Issues regularly surface in the minds of all physicians, touch a sensitive nerve, cause a transient psychophysiological response, and soon are forgotten. Inertia, shyness, or a "don't-rock-the-boat" personality may explain the lack of action. In a democratic society—and The Medical Society of New Jersey is such an institution—there should be no place for this behavior pattern.

Take the matter of the physician assistant (PA) as a point in question. The media recently have publicized the fact that June 1977 will see the first class of graduates from CMDNJ—Livingston College PA Program emerge in a state where there is no enabling legislation which will permit them to work. At present there are 20 students in the first year, 22 in the second year, and 17 in the third year (graduating class).

One newswriter claimed that "intensive lobbying against the bill (Senate 1354, to amend New Jersey's Medical Practice Act) by the Medical Society, the State Board of Medical Examiners, and the State Board of Nursing" is interfering with the passage of necessary legislation. Although this is not totally in keeping with the facts, it is true that the official position of the Society has not been a clear statement that will enhance the status of current students at Livingston College nor motivate the legislature to speed passage of an acceptable bill.

A poll of New Jersey physicians in the recent past suggested that a large majority of those

who responded were favorably inclined toward and would consider employment of physician assistants. To those who become acquainted with the didactic education and clinical training of PA's it is obvious that these health professionals are neither nurses nor technicians. Furthermore, they are not meant to be under-trained physicians. The Attorney General of New Jersey described a physician assistant as "a person who provides patient services under the supervision and direction of a licensed physician."

The Livingston College—Rutgers Medical School Physicians' Assistant Program, which has received initial approval from the AMA, is a three-year collegiate-based program whose first-year students have already successfully completed one year of college. A baccalaureate degree is awarded to students by Rutgers University after successful completion of 116 credits. The course of study includes the following:

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Clinical clerkships II and III

Although experience at Duke University and elsewhere has shown that PA's may progress in both a horizontal and vertical fashion, some going so far as to matriculate in a medical school and receive an M.D. degree, the con-

tribution each will make in the provision of health care depends to a large extent on the supervision and controls of the individual physician by whom he is certified and employed.

The potential functions of PA's and their usefulness in various health settings in both urban and rural communities should be obvious. The upward spiraling demand for health services, especially in areas where there is a relative or actual physician shortage, conceivably can be met by the availability of physician assistants to those few physicians who are overworked and overburdened in such areas. The nature of the PA concept is such that these "physician extenders" can permit harassed practitioners to expand the quantity yet maintain the quality of services to their patient population. The physician always should maintain control of and responsibility for the physician assistant in the same way he does for his nurse, his technician, and for himself.

Individual physicians who view the physician assistant as a desirable addition to the health profession in New Jersey should say so to their county delegates, to the Board of Trustees of the Society, and to their representatives in the legislature. Physician assistants are inevitable in New Jersey, so the empowering law should be such that organized medicine and individual physicians will be satisfied with its content. Without input from physicians, we may be destined to have an arrangement which will be less than to our liking. For this and other reasons, become acquainted with the situation in New Jersey. Don't be a clam; make your feelings known on this subject. A.K.

Speech Disorders

The case report dealing with cluttered speech and neurological disorders in this issue (see page 547) deserves the attention of all our readers, especially primary physicians. Although one swallow does not make a summer and one case is not a series, the object lesson here is quite clear.

The primary physician—the front line of diagnosis—often becomes so interested in unusual heart murmurs and breath sounds that seemingly less important aspects of physical diagnosis may be overlooked. Systemic diseases are sometimes heralded by dental and periodontal disorders. The characteristic telangiectatic lesions of the lips—a road sign to Osler-Weber-Rendu disease—are often ignored until the patient has hemoptysis.

Although cluttering, described as rapid speech with faulty rhythm, ought to be recognizable promptly by physicians, we may tend to consider it a phenomenon of psychologic origin along with other speech disorders. The authors remind us, rightly, that that may be true, but that it is also a possible reflection of organic central nervous system dysfunction or pathology.

Clearly, the only approach to establish its significance is to consult an expert. The speech pathologist, who is oriented to the interrelationship of neurological disease and speech production, should be asked to evaluate any disorder of verbal communication, whether known neurological disease has been established or not.

A.K.

A New Form of Child Abuse

Physicians have been aware of and on the lookout for physical child abuse for some years. The kind of atrocities against infants and defenseless children which leads to almost unimaginable injuries and death is quite well known to us. We understand the psychopathology of the perpetrators of such crimes

as well. It now seems that a new form of child abuse, for different reasons, has appeared on the scene.

Authorities of the Odyssey Institute of New York recently brought before government officials the fact that publishers of pornographic material are using children between the ages of six and sixteen as models for their obscene literature. Photographs of the genitalia of these youngsters, some of whom are induced to simulate masturbation or self-stimulation, are now featured in a new brand of smut.

Can one possibly infer that publication of such photographic garbage is anything but harmful to both the participants and the viewers? Does such material have even a single redeeming feature? It would appear not. This type of material can appeal only to the pedophile, a type of sexual deviate whose sociopathic personality disorder is particularly resistant to therapy. Pedophiles are said to restrict their sexual activity to masturbatory and exhibitionistic behavior, but they may attempt to penetrate an infant or very young child on occasion.

Can one condone such loathsome conduct on the part of the parents of the child models, the photographers, the publishers, and the sellers of such material under the guise of freedom of the press? Scurrilous editions whose total impact is to extract money from the pathetic, masochistic practitioners of pediophilia may not be innocent. They may stimulate and encourage such sexual deviates to act out their need for punishment against living children as well as against themselves.

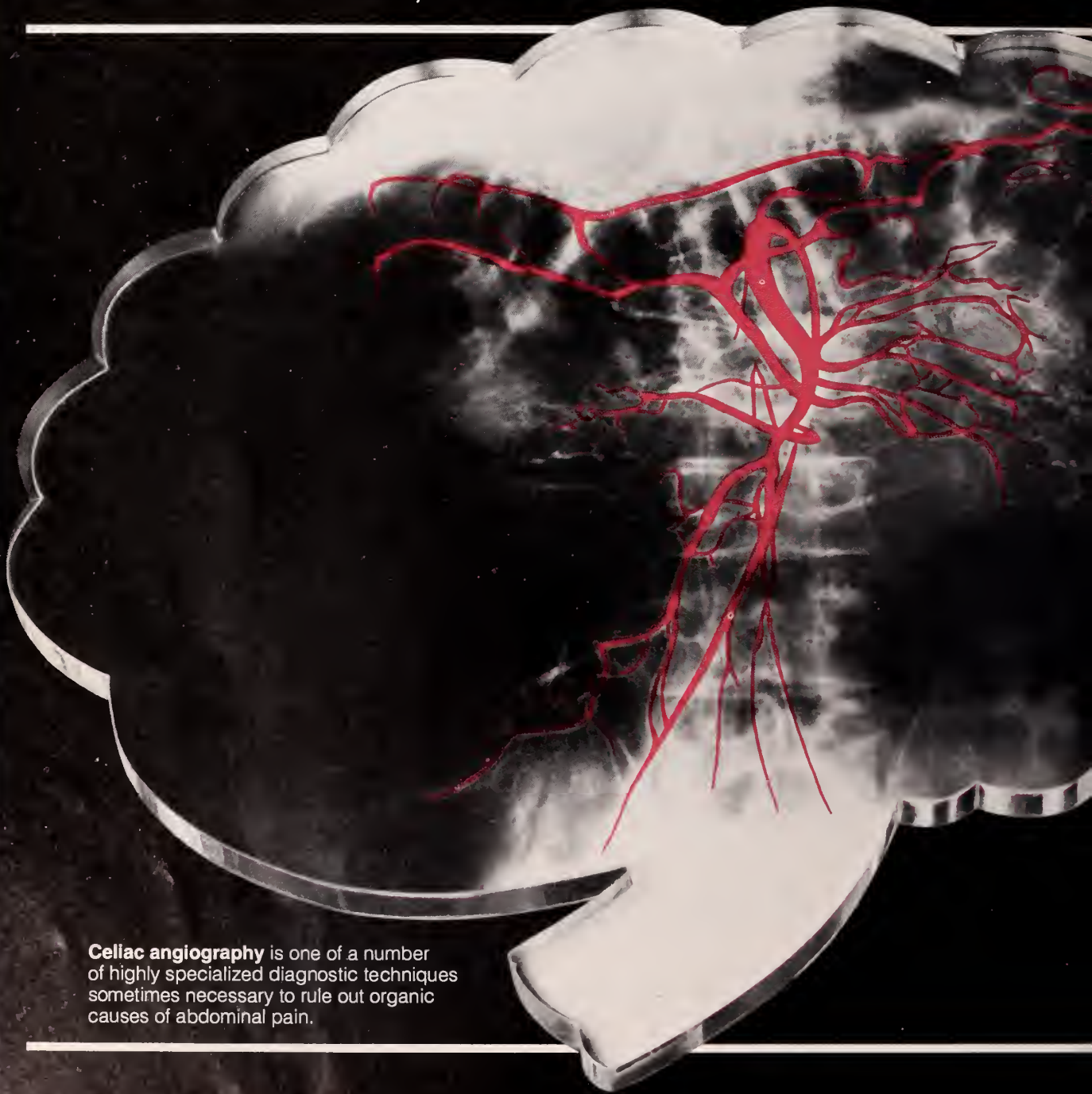
Physicians individually and collectively should hasten to condemn this new form of child abuse.

A.K.

Cover Photo

The cover photograph was contributed by Richard Musgnug, M.D., of Cherry Hill, who also provided us with the original picture of the surfer for the April cover.

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As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider pharmacologic effects of agents, particularly potentiating drugs such as MAO inhibitors and

phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are avoidable in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, i.e., dryness of the mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.

Dosage: Individualize for maximum beneficial effects. Usual maintenance dose is 1 or 2 capsules, 3 or 4 times a day, before meals and at bedtime. Geriatric patients—see Precautions.

How Supplied: Librax is available in green capsules, each containing 5 mg chlordiazepoxide hydrochloride (Librium®) and 2.5 mg clidinium bromide (Quarzan®)—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50, available singly and in trays of 10.

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ORIGINAL ARTICLES

This Is Day One

Frank R. Begen, M.D., Teaneck*

The medical care delivery system is in Crisis!

For years we heard this cry and we knew it for what it was: a political ploy to attract votes or a professional consumerist's attempt to justify his existence.

How, we asked, can they attack the best, most advanced system in the world? Surely all we needed to do was point to these facts and the public would put an end to this senseless clamor. Hence our concept of the problem and our response to it was weak. We trumpeted our achievements, castigated our detractors, and conscientiously avoided the facts. We treated with contempt the real and imagined problems that demanded our united efforts to achieve resolution.

So now we have a real crisis. It is a problem created just outside the range of our short-sighted vision by the politicians, consumerists, well intentioned liberals, and delighted bureaucrats, and fueled by our inadequate, self-serving responses.

What is the Crisis?

The Crisis is the issue of distribution and quality versus cost. This is very acute today and will be more so in the future. The public and our government see this falling into four main areas: (1) financial protection for the consumer, (2) equity and availability of services, (3) quality and effectiveness of the services, and (4) cost containment.

We are at a critical period where an educated public and responsive government are demanding that we achieve goals that are satisfactory to all areas of our society. Our task is to see to

it that we play a significant part in this process. We acknowledge that the goals to be achieved must be satisfactory to the nation, but those goals also must meet the standards of its physicians!

We need to develop a better understanding of what the problems and issues are out in the field. We must present proposals that are creditable to both the public and to the legislators. Unless we do this we will be ignored in the future. It is a difficult task for the medical profession. The last time we were united as just plain M.D.'s was graduation day. We all sat in our mortar boards and robes feeling proud of ourselves and each other. Since then we have scattered on the winds of specialization and developed parochial points of view.

Within our society we have a current example of suspicion and hostility—at the State level it's whispered that Bergen County has *three* representatives on the Executive Committee; in Bergen County it's "watch those guys from Hackensack Hospital," while in Hackensack Hospital, it's "those damn surgeons!" This must be overcome if we are to have fire power. The fact of physician individualism makes this more difficult. But unless we unite from the grass roots up, to elect and then support enlightened leadership that copes with reality, we are doomed to the role of a public utility.

Public Responsibility

We must remind the public that it too has a responsibility—to participate in a thoughtful manner. It is not enough for a voter to go out and pull the lever on election day then go back

*Inaugural address on the occasion of the author's induction into the presidency of The Medical Society of New Jersey. Presented to the House of Delegates, second session, May 15, 1977, Atlantic City.

to his television and expect it all to happen. We are living in the day of the Health Service Agency which was created by the Health Manpower Act of 1974 and which has been implemented in such a way that the public has the majority representation in each area. It is not enough that everyone—the elderly, the unions, the poor, the teachers, and so on—is represented. HSA must be controlled by qualified and faithful people.

There is a problem in getting the consumers out to the meetings in large enough numbers to outnumber the providers as the law requires. Some cannot be pried out at night with limousine service. Many adopt an adversary or outright belligerent attitude toward the providers. HSA must be a cooperative effort which provides mutual education.

Our HSA has demanded that each hospital in the Bergen-Passaic area submit a five-year plan of future development. This is a prime example of a bureaucracy destroying the reason for which it was conceived and created, i.e., equitable distribution and cost containment. We watched while each hospital and each department planned for every advanced, esoteric piece of equipment and facility they could think of, lest the other hospital get there first. Things they would not have gone after for 10 to 20 years were included, lest the other hospital get there first. This could have been avoided by proper consultation between the providers themselves and between the consumer and providers.

A New Ball Game

In considering health care as a "right," society has changed the ball game. It did so without realizing the cost implications of that concept. It was said that "personal income should no longer be a factor." This changes things considerably and yet the agencies that deliver and finance medical care have changed little if at all. The philosophy of everything for everybody surely will bankrupt the national treasury.

Legitimately, as now constructed, the health care delivery system of the United States could devour every dollar thrown at it. We are not going to be able to do everything that we know how to do; we will need priorities in medical care. In our present medical care system we have neither the mechanism nor the incentive to practice medicine within a constrained budget. But we must be selective because there is a finite amount of money for seemingly infinite medical problems—How much for coronary by-pass operations? How much for renal dialysis? How much for tongue depressors? And how much for copy paper?

These and other questions must be answered. We physicians must be willing to explore new modalities. We must be bold. We must be honest in presenting viable, creditable plans for health care delivery. Our plans must be consistent with public demands and with reasonable cost containment. We must not be reactionary but we must become believably creative. And we must learn to do it together as a united community of providers.

Start Now

Let us start here—now! Let us show consumers, the HSA staff, and the federal government how diverse groups in our profession can cooperate.

Let the county medical societies think together, act together, and trust each other.

Let each hospital realize it is part of the mainland—not an island apart.

Let each speciality remember we are first of all physicians, then specialists. We are a band of brothers—let us lock arms. Then perhaps the consumers, the HSA staff, and the federal government will realize that together—truly together—we can solve our problems.

This is *Day One*—let us start now!

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AMERICA'S LEADING NATIONAL BRAND OF GENERICS

A study of 50 hospitalized patients with active tuberculosis and an age-race-sex matched control group was conducted in Newark, New Jersey during 1973. At the time of this study, Newark ranked first in the incidence of active TB among the major U.S. cities. Those environmental and social factors contributing the greatest risk of infection and subsequent hospitalization included migration to Newark from rural areas (six-fold increase in risk), particularly from the southeast United States, and residence mobility within Newark (four-fold increase in risk). This disease was found associated with significantly lower weight both prior to and at admission to the hospital. In addition, analyses of the Quetelet Index ($\text{Weight/Height}^2 \times 100$) showed cases to have significantly lower values suggestive of severe protein and calorie depletion.

Active Tuberculosis Among the Inner-City Indigent

Perspective on the 1970's

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The rates of new active tuberculosis have been dramatically reduced in the last twenty years. The new active tuberculosis case rate in the United States was 49.3 per 100,000 population in 1954; by 1974, the rate was reduced to 14.2 per 100,000.¹ The secular trend in the annual tuberculosis case rates from 1963 to 1973 has shown the rates in the 58 largest cities in the U.S. to be at least twice the observed rate of other areas.² In 1973, nearly one-half of the tuberculosis cases in the United States were found to occur in cities of 100,000 population or larger.² As the population size decreased in the cities, so did the case rate of tuberculosis.

Tuberculosis appears to have retreated into pockets of densely populated areas which often challenge the residents with a variety of physical and social stresses. The factors associated with elevated rates of tuberculosis have included poverty, unemployment, overcrowding, poor housing, alcoholism, and protein-calorie malnutrition.³⁻⁶ In the inner city, tuberculosis is a disease of the homeless, displaced, and transient.⁷ Immigrants have been identified as a continuing source of infection.⁸

Tuberculosis rates are higher in excessively crowded urban areas which provide a myriad of environmental exposures which may reduce the level of resistance to infection in the community. It is uncertain, however, to what extent these environmental conditions contribute to the etiology of this disease. Alternatively, inner city areas may attract persons who already are infected with the tubercle bacillus. Those characteristics of an inner city population and their environment which were associated with the excess of tuberculosis observed in Newark were examined in this study.

Materials and Methods

In 1973, Newark, New Jersey had the highest new active tuberculosis case rate among the largest cities in the United States; this rate was 58.9 per 100,000.⁹ The comparable rate in the U.S. (total) was 14.8 per 100,000 and 25.7 per 100,000 among the 58 U.S. cities of 250,000 population or greater.⁹ Thus, Newark was selected as the site for this study. Fifty consecutively admitted and bacteriologically confirmed patients with active pulmonary

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tuberculosis formed the case group. The case group included both newly diagnosed tuberculous infections and persons whose tuberculosis had been diagnosed prior to this hospital admission. These patients were admitted to a large teaching hospital serving the medically indigent of Newark. An age-race-sex matched control group of patients admitted to a general medical ward of this same hospital was selected for comparison. Controls were admitted within five calendar days of their respective cases and were free of manifest pulmonary disease. The data reported in this study were collected in bedside interviews. Data on family and medical histories, and smoking, occupational, and nutritional habits were ascertained. The Quetelet Index ($\text{Weight/Height}^2 \times 100$) was calculated for each study subject as it has been found to be a useful, age-independent index of protein-calorie malnutrition and highly correlated with anthropometric measures of adiposity.¹⁰ Analyses of the differences observed in the pair-matching design were statistically evaluated using the paired t-test and McNemar's Chi Square.^{11,12} An estimate of the risk of developing tuberculosis associated with observed characteristics also was calculated.¹³

Results

The patients included in this study were residents of the inner city areas in Newark and predominantly medically indigent. The mean age of the tuberculous patients was 39.8 years and 40.3 years for the matched controls. Table 1 presents data on selected sociodemographic characteristics of the cases and controls. The tuberculosis cases were largely male (78 per cent) and nonwhite (92 per cent). Slightly larger proportions of the cases (34 per cent) than controls (26 per cent) were single (never married). Controls, however, had an excess of persons in some state of marital disruption (including separation, divorce, and widowhood). Cases demonstrated more than twice the proportion "married" as controls, yet the proportions were small in each study group. At least half of each group received nine years or less of formal education.

The occupational history was designed to gather data on the patient's usual occupation,

Table 1
Sociodemographic Characteristics of Cases and Controls

Characteristics	Cases		Controls	
	N	%	N	%
Total	50	100.0	50	100.0
1. Sex				
Male	39	78.0	39	78.0
Female	11	22.0	11	22.0
2. Race				
White	4	8.0	4	8.0
Nonwhite	46	92.0	46	92.0
3. Marital Status				
Single, never married	17	34.0	13	26.0
Married	14	28.0	6	12.0
Divorced, widowed, separated	19	38.0	31	62.0
4. Education				
9th grade or less	25	50.0	27	54.0
10th - 12th grade	24	48.0	22	44.0
Some college	1	2.0	1	2.0

Table 2
Usual Occupation of Cases and Controls

Usual Occupation	Cases		Controls	
	N	%	N	%
1. <i>Semi-skilled</i>				
Factory	12	24.0	7	14.0
Maintenance and janitorial	11	22.0	6	12.0
Construction labor	9	18.0	10	20.0
Truck driving	7	14.0	9	18.0
Agriculture	2	4.0	1	2.0
2. Sales and Small Shop	4	8.0	13	26.0
3. White Collar	5	10.0	4	8.0
Total	50	100.0	50	100.0
Mean Years employed in the usual occupation (S.E.)	6.50	(1.26)	7.76	(1.23)
(p = .48)				

length of time spent in this occupation, identification of occupational exposure acknowledged by the patient as irritating, and the duration of unemployment experienced prior to this hospital admission. The distribution of the study subjects by their usual occupations is presented in Table 2. A comparison of cases and controls showed the former to have an excess of factory (nonspecific), maintenance, and janitorial workers while the controls had larger proportions working as truck drivers and in sales and small shop work. Few cases or controls were employed in white collar positions. Investigation into the hours or shifts worked showed cases to work more commonly during the late evening and early morning

hours (6 pm-2 am). This was especially true for cases employed in the factory or janitorial positions. This is a presumed consequence of the necessity of performing janitorial duties after normal office hours. In addition, cases were observed to have shorter (although not significantly) service durations in their usual occupation ($p = .48$).

Patients were asked to identify occupational agents which they found to be irritating, particularly to the respiratory tract (Table 3). Exposures to large, respirable particulate matter were essentially similar between cases and controls. More specifically, cases showed excess employment in jobs with exposures to paper dust, fiberglass, and asbestos. Controls, however, reported excess occupational irritation by silica (usually from sandblasting operations). Fume exposures were reported as more commonly irritating among the controls. It should be emphasized that these distributions reflect the patients' subjective perceptions rather than documented environmental levels.

Table 3
Occupational Exposure to Irritating Substances

Irritating Substances	Cases		Controls	
	N	%	N	%
Large Particulate - dust				
Linen dust	2	4.0	2	4.0
Fiberglass, asbestos	3	6.0	1	2.0
Sheet rock, silica	6	12.0	11	22.0
Machine grinding dust	3	6.0	3	6.0
Paper dust	10	20.0	6	12.0
Smoke, ash	1	2.0	0	0.0
Small Particulate - fume				
Tar, rubber	1	2.0	2	4.0
Diesel, kerosene	2	4.0	4	8.0
Acid	2	4.0	6	12.0
No irritants contacted	20	40.0	15	30.0
Total	50	100.0	50	100.0

Table 4
Duration of Unemployment Prior to Admission

Duration	Cases		Controls	
	N	%	N	%
Less than 1 week	14	28.0	13	26.0
1 week - 3 weeks	3	6.0	3	6.0
1 month - 3 months	6	12.0	5	10.0
4 months - 1 year	9	18.0	13	26.0
More than 1 year	18	36.0	16	32.0
Total	50	100.0	50	100.0

An examination of the duration of unemployment prior to this hospital admission showed a bimodal distribution for both cases and controls (Table 4). Large and similar proportions of both groups experienced brief work interruptions prior to their hospital admission. This was usually in the form of sick leave. More than one-third of each group had extended periods of unemployment (one year or more) prior to admission. Controls demonstrated a slight excess of intermediate-duration unemployment (four months to one year) prior to admission.

An examination of the study subjects' usual daily cigarette consumption levels in Table 5 showed that the controls smoked significantly more cigarettes than cases on a daily basis ($p = .04$). The majority of both groups smoked; however, the cases had an excess of light smokers (less than one pack daily) and the controls had a greater proportion of persons smoking one pack of cigarettes daily.

Examination of the migration patterns of the patients indicated that a far greater proportion of the controls were born in and have resided continuously in Newark (Table 6). In contrast, the vast majority of tuberculosis cases migrated to Newark, usually in search of employment early in adulthood. Most commonly, tuberculosis cases emigrated from the southeastern region of the United States.

Both cases and controls were highly mobile during their residence in Newark. Small proportions of both cases and controls resided in the same dwelling for more than five years (Table 7). The group differences observed categorically became apparent when a con-

Table 5
Usual Daily Cigarette Consumption

Daily Cigarette Consumption	Cases		Controls	
	N	%	N	%
None	11	22.0	9	18.0
Less than 1 pack	15	30.0	6	12.0
1 pack	12	24.0	24	48.0
More than 1 pack	12	24.0	11	22.0
Total	50	100.0	50	100.0

tinuous measure of time at last residence was analyzed. Cases spent one and one-half years less (on the average) in their most recent dwelling than controls, although this observed difference is statistically insignificant ($p = .28$).

Investigation of acknowledged family history (parents and siblings) of tuberculosis showed cases to have twice the proportion with a family history of tuberculosis (Table 8). This family history was almost entirely confined to those patients who migrated to Newark from the southeastern states. Few of these patients' families migrated to Newark with the study subject and thus further contact with the disease was usually due to community contact. When queried about known contact with tuberculous persons exclusive of family contacts, equal and large proportions (38 per cent) of each group responded affirmatively.

A variety of measures of nutritional status were examined. Patients were asked to estimate their usual weight prior to this illness. Anthropometric studies have found self-estimates of weight and scale weights to be closely correlated¹⁴ with a tendency for lighter persons to overestimate their scale weight.¹⁵ There was a significant difference between cases and controls in each of their weight and nutritional status indicators (Table 9). Tuberculosis patients' estimated usual weights were significantly lower than the hospitalized controls prior to admission ($p = .01$). This finding should be interpreted with caution due to the reliance upon the patient's estimate. As expected, tuberculous patients had significantly lower weights as measured upon admission. Weight loss among the cases was considerable as demonstrated by the difference in the usual (estimated) weight and admission weight.

The Quetelet Index ($\text{Weight}/\text{Height}^2 \times 100$) is a useful, age-independent index of protein-calorie malnutrition.¹⁰ Skeletal muscle and subcutaneous fat are the nutritionally labile tissues most depleted in protein-calorie malnutrition.¹⁶ Thus, changes in the Quetelet Index are most often attributed to changes in the weight component of the index. Upon admission, the cases' Quetelet Index was

Table 6
Distribution By Region of Birth Place

Region of Birth	Cases		Controls	
	N	%	N	%
Newark, N. J.	3	6.0	12	24.0
Other Middle Atlantic	5	10.0	1	2.0
South Atlantic	35	70.0	30	60.0
Other	7	14.0	7	14.0
Total	50	100.0	50	100.0

Table 7
Length of Time Spent at the Most Recent Residence Prior to Admission

Time spent at last residence (years)	Cases		Controls	
	N	%	N	%
Less than 1 year	15	30.0	13	26.0
1 - 4 years	25	50.0	23	46.0
5 - 9 years	5	10.0	9	18.0
10 or more years	5	10.0	5	10.0
Total	50	100.0	50	100.0
Mean and S.E.	3.66 yrs (0.69) 5.02 yrs (1.06)			
($p = .28$)				

Table 8
Acknowledged Contact With Tuberculous Persons

Contact	Cases		Controls	
	N	%	N	%
Total	50	100.0	50	100.0
Family History (Parents and Siblings)				
Yes	8	16.0	4	8.0
No	42	84.0	46	92.0
Community Contact (Newark)				
Yes	19	38.0	19	38.0
No	31	62.0	31	62.0

significantly lower than the controls' ($p = .01$). An index of 2.7 is indicative of protein-calorie stores depletion. This depletion, however, obscures the component attributable to poor dietary intake from protein store depletion associated with the tuberculosis infection.

An estimate of the usual, pre-admission Quetelet Index again shows cases to have indices significantly lower than controls ($p = .01$). Recognizing the likelihood for error in these estimates, the patients' stated weights were adjusted by five pounds (adding five pounds to cases' weights and subtracting five pounds from controls' stated weights). This adjustment makes comparison very conserva-

Table 9
Weight History and Nutritional Status

Weight History (pounds)	Cases		Controls		Significance
	(N=50)		(N=50)		
	Mean	S.E.	Mean	S.E.	
Usual weight (estimated)	151.72	3.47	166.72	5.07	.01
Admission weight	127.78	4.19	155.08	6.00	.01
Quetelet Index* at Admission	2.7	0.03	3.4	0.09	.01
Quetelet Index at Usual Weight	3.3	0.01	3.6	0.03	.01
Quetelet Index-adjusted**	3.4	0.03	3.5	0.01	.05

* Weight/Height² x 100

** Adjusted for error in estimating weight

tive since, if the tuberculous group was indeed lighter than the controls, their stated weights would be five pounds (on the average) higher than their true weights. Thus, this adjustment tends to make the weights more homogeneous than the true weights may have been. Although conservative, the Quetelet Index utilizing this adjustment to the usual weight is still significantly different for the cases with respect to the controls ($p=.05$).

The importance of various social and environmental characteristics in the identification of this high-risk, inner-city population for tuberculosis, may be demonstrated by the magnitude of the risk associated with each characteristic. The risk estimates reported in Table 10 show that occupational exposures and known community contact or family history of tubercu-

losis were only weakly and inconsistently associated with tuberculosis among the patients. Measures of mobility (migration from region of birth and intra-Newark transiency) significantly elevated the risk for developing tuberculosis. This was particularly true for migration from the South Atlantic States (especially North and South Carolina) which was associated with a six-fold increase in risk. Increased mobility in Newark also was associated with a significant elevation in risk.

Discussion

As tuberculosis incidence has declined over the years, it has retreated into isolated pockets of relatively high incidence. Newark, New Jersey, is an example of such an area. With rural to urban migration, the health problems of the

Table 10
Tuberculosis Risk Associated With Selected
Environmental Characteristics

Environmental Characteristic	Risk Estimate	Significance
1. Type of Occupation		
All Blue Collar Jobs	0.99	N.S.
Large Factory	1.37	N.S.
Maintenance and Janitorial work	1.47	N.S.
2. Acknowledged Occupational Irritants		
Dusts — all types	0.82	N.S.
Fiberglass and Asbestos	2.25	N.S.
Paper Dust	1.25	N.S.
Fumes — all types	0.31	N.S.
3. Contact With Tuberculous Persons		
Family History	2.19	N.S.
Community Contact (Newark)	1.00	N.S.
4. Time at Last Residence Prior to Admission		
Less than 5 years	4.44	.05
5 — 9 years	3.60	N.S.
5. Migration to Newark		
Any	6.14	.05
From South Atlantic States	6.63	.01
Other Middle Atlantic	3.26	N.S.

inner city often have been exacerbated. A strong urban to rural gradient in disease prevalence exists for many diseases, including tuberculosis. Since Newark ranked number one in the nation at the time of this study, it was of interest to characterize the population which supported the persistently elevated incidence in active disease.

The population examined was predominantly male and nonwhite. An unexpectedly large proportion of cases were single (never married). Marital dissolution through divorce, separation or widowhood was common, especially among the controls. Marital estrangement is a risk factor which has been incriminated as a source of social stress which may contribute to a diminution of resistance to all forms of infection, including tuberculosis. It appears that, although tuberculosis cases lived in densely populated, urban areas, they did so by remaining social isolates. They were most often occupants of rooming houses or one-room flats above store fronts. Their lack of education and occupational seniority forced them into unskilled jobs and often necessitated employment during the late evening and early morning hours (6 pm to 2 am). Occupational irritants most often subjectively identified included paper dust, fiberglass, and asbestos. Few of the cases had irritating, occupational exposures of long duration. The relative lack of importance of the occupational variables may, however, indicate the selective movement by workers destined for tuberculosis out of such occupational categories which they found physically challenging. The occupational and mobility indicators may be signs of an underlying, progressive disease process which limits the physical capacity to tolerate physico-chemical stress in the forms of dust, fumes, heat, vapors, and so on. Alternatively, these variables together may be indicative more of a behavioral type which resists stability of any type (residence, employment, marital status, and so on). These factors together may elevate one's risk of tuberculosis, particularly in the frustrating search for satisfying employment subsequent to departure from more rural areas.

The question of the effect of migration on the

occurrence of tuberculosis is an enigma. The vast majority of both groups moved into the city from more rural and usually southern areas. Only cases, however, demonstrated frequent opportunities for household contact with the disease prior to their departure for Newark. Without information on the reactivity of these subjects at the time of moving to Newark, it is impossible to say whether the source of infection was in the region of birth-place or in the high incidence, urban area. A comparison of the duration of residence in Newark showed that both cases and controls had spent a considerable amount of time in the city prior to admission (mean of 17.12 years for the cases; 17.38 years for the controls). If the cultural and environmental stress induced by migration to an urban area was a potent precipitator of reduced resistance to infection, then we would expect to see the tuberculosis hospitalization earlier in their urban residence history. Measures of environmental and social stress were remarkably consistent from the initial time of residence in Newark to the time of hospital admission. There is no evidence that this disease event was a consequence of a recent life change. Rather, the consistent patterns of mobility, both in urban migration and intra-urban residency, appear as significant contributors to the risk of being hospitalized for this disease. Hospitalization with active tuberculosis, however, is indicative of the severity of the disease process and, as such, cannot elucidate the relationship of these environmental characteristics with tuberculosis infection. The use of tuberculosis hospitalization as the health outcome may reduce our ability to illustrate environmental aspects important in the etiology of tuberculosis infection prior to admission.

The similarities observed between cases and controls in the various occupational characteristics and acknowledged contact with extra-familial cases of tuberculosis in the community may indicate the conservative nature of the comparisons discussed above. Factors which increase the risk of hospitalization with tuberculosis may also be active in the disease process requiring hospitalization among the controls. One such factor is cigarette smoking.

Thirty-two per cent of the controls were observed to have admission diagnoses in which cigarette smoking may be a contributor (e.g., cardiovascular disease). Such similarities serve to increase the difficulty in establishing important, environmental differences between cases and the controls. If, as in this study, differences emerge despite the dilution effect consequent to the inter-group similarities, then we may have greater confidence in the findings as identifying important correlates of the disease event.

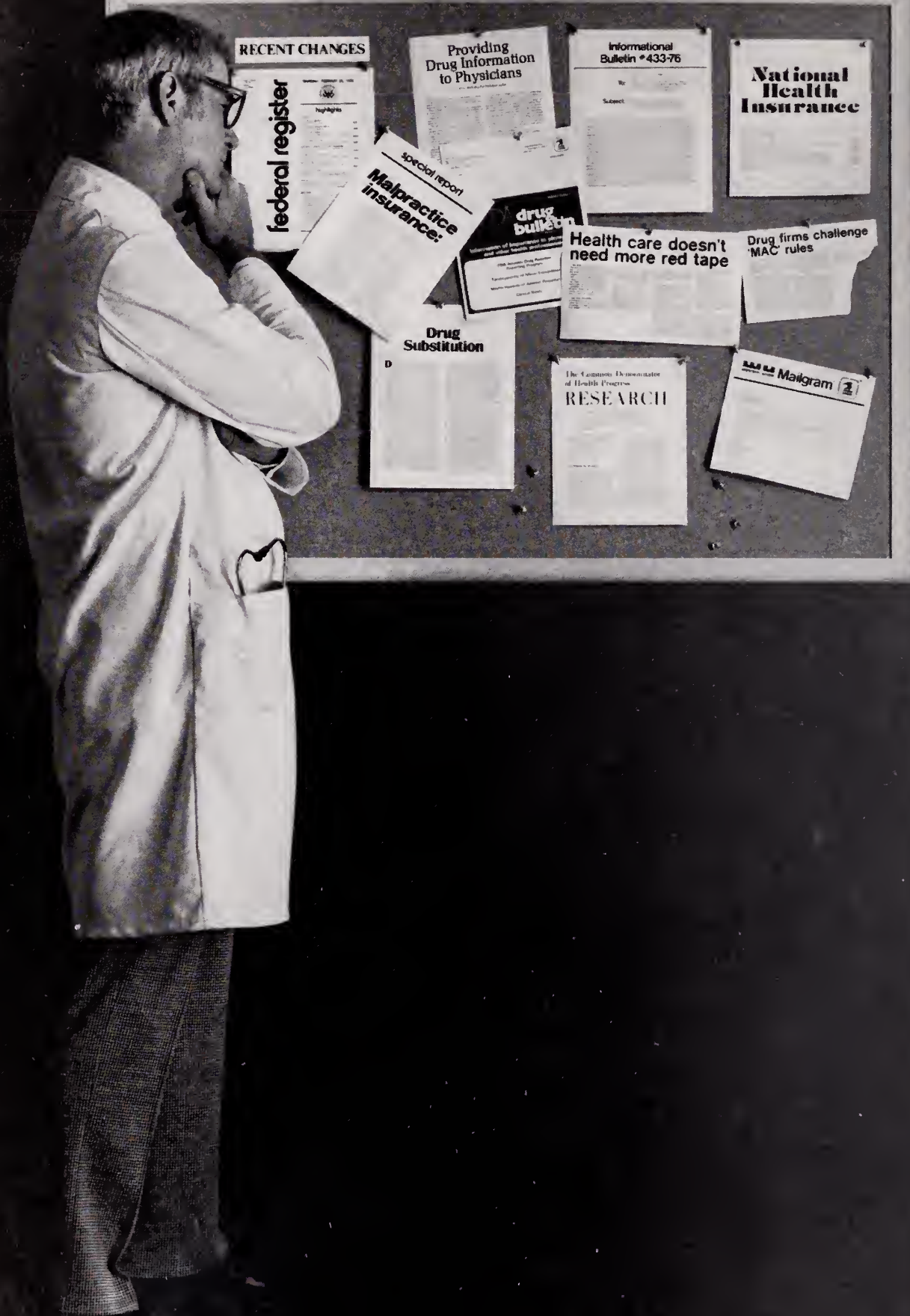
Tuberculosis patients were found to be at significantly lower weight levels both prior to and at admission. More importantly, an estimate of protein-calorie malnutrition, the Quetelet Index, distinguished the tuberculous patients from their matched controls. Both groups lived in the poor, inner-city areas of Newark. Yet this indicator of nutritional status was useful in contrasting tuberculosis cases from other patients who also are in a diseased state and therefore subject to protein and calorie depletion. The distinguishing character of Quetelet Index prior to admission requires replication and further study due to the subjective nature of these data in this study. It may provide a useful tool for the identification of persons in the community at higher risk of tuberculosis prior to the demonstration of symptoms of active disease.

The importance of identifying infected persons, particularly among the migratory portions of the population must be emphasized. Individuals who move into a community may conceal a significant hazard to the community's health.¹⁷ Our inability to maintain successful disease surveillance in such mobile groups or effective follow-up of recovered cases and their pre-admission contacts are, perhaps, the most important explanations for the persistent excess of tuberculosis in our urban areas.

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THERE ARE A LOT OF PEOPLE GETTING BETWEEN YOU AND YOUR PATIENT.

Medicine today is in the spotlight, subjected to all kinds of scrutiny. Your control over patient therapy is being monitored, judged and occasionally abrogated, sometimes by unknown third parties.

The worry is that in the wake of this focus, the relationship between you and your patient will be weakened, without offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your non-generic prescriptions be filled with the precise products you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original NDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is a Federal regulation designed to cut the Government's drug bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only for the cost of the lowest-priced, purportedly-equivalent,

generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than \$1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

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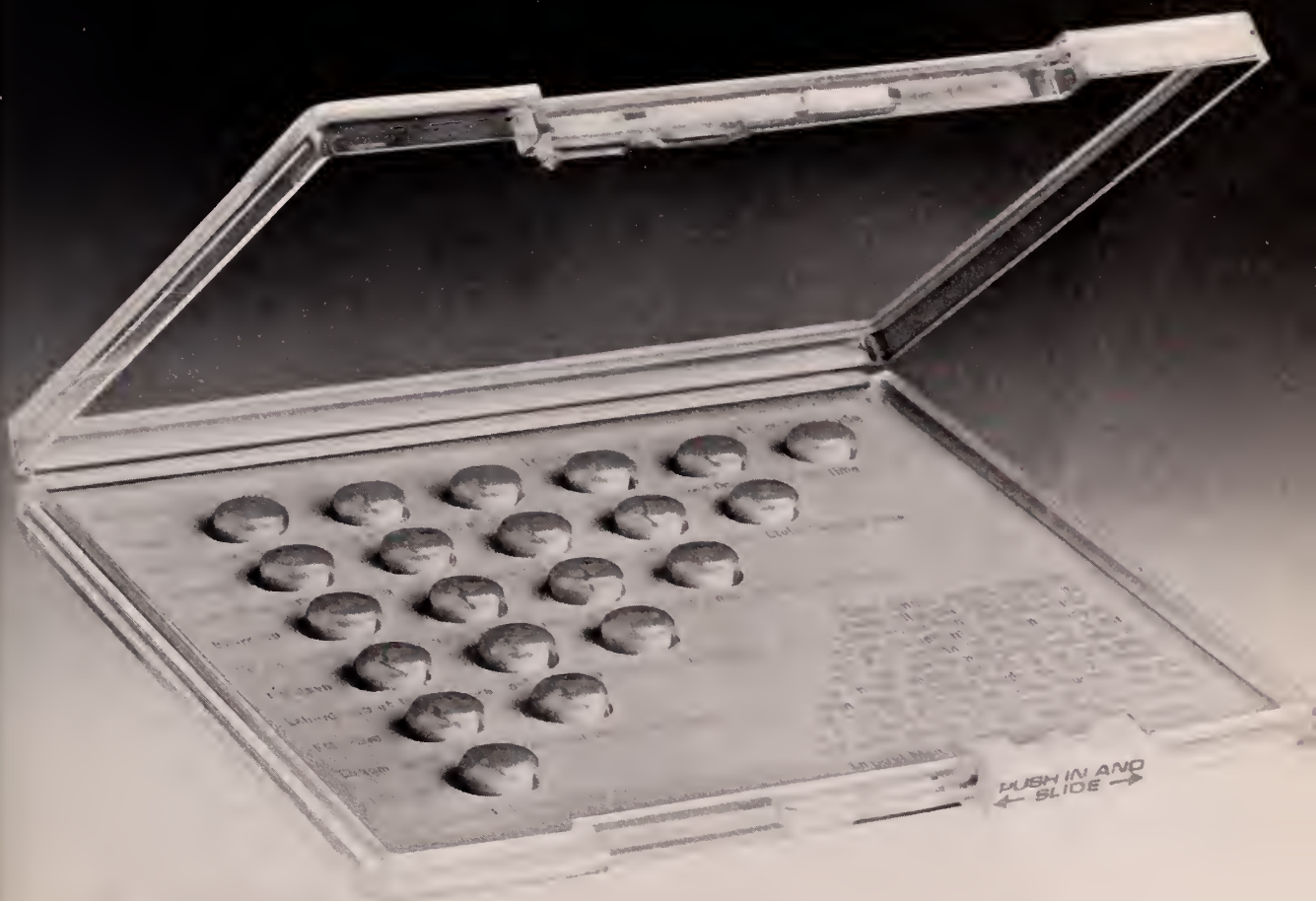
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There continues to be confusion as to the significance of x-rays in the diagnosis of hip dysplasia in infancy. Because of this, unnecessary delay in treatment still occurs. In the newborn, diagnosis is by physical examination only, and a seemingly "normal" x-ray should not delay treatment. After the immediate newborn period, the acetabular angle is simple to obtain, reproducible, and a statistically significant means of confirming this diagnosis.

Evaluation For Hip Dysplasia In Infancy*

The Significance of X-ray in Diagnosis

Paul J. Hirsch, M.D., Stuart A. Hirsch, M.D., and Lynn Reedman, CMA, Bridgewater

In 1929 Putti¹ expressed the strong belief that treatment of infantile hip dysplasia should be initiated "from the moment of birth," and repudiated the majority of orthopedic opinion at that time that such treatment was either valueless or harmful at so early an age. His concept took hold slowly, however, for not until recently has the diagnosis and treatment of hip dysplasia in the newborn become an accomplished fact.

In 1956 when most centers were beginning to emphasize the early diagnosis and treatment of hip dysplasia, Caffey² studied the radiologic findings in newborns, reported the well-known difficulty in radiologic evaluation of the newborn hip and concluded that treatment of hip dysplasia was contraindicated until such age when the x-ray could be more clearly evaluated. Because he found the acetabular angle to be a poor measurement in the newborn and because he found x-rays in general not helpful at this age group, he concluded that efforts at diagnosis in the newborn, and institution of early treatment, should be discouraged.

Also in 1956, as if in answer to Caffey, Coleman³ emphasized the need for careful physical evaluation of the newborn, and for early treatment. He stated "a normal x-ray appearance of an infant's pelvis does not necessarily rule out congenital hip dysplasia." He further noted that when the x-ray was not confirmatory, in the face of a clinical diagnosis of dysplasia, then "the x-ray means nothing." He concluded that the practical importance of early diagnosis

was obvious, and that as simple and effective as treatment is, it is obligatory for all patients with findings suggestive of hip dysplasia.

Subsequently, Laurensen⁴ stated that Caffey's conclusions were "dangerous because they are negative (and) discouraged the early diagnosis of a condition which has a serious aftermath." Although we know that many instances of hip dysplasia will heal spontaneously, we also know that some will proceed to dislocation, and some will retain dysplastic features, becoming symptomatic in adulthood. Mitchell⁵ has noted that "minor degrees of displacement warrant treatment because young adults with no previous history of hip trouble not infrequently present with painful arthrosis due to acetabular dysplasia." Because treatment other than casting is so simple and effective and so completely without untoward results "it cannot reasonably be withheld from any infant in whom the suggestion of an abnormality exists."⁶ We previously have reported⁷ our method of treatment with the Pavlik harness (Figure 1); all patients were managed in this fashion. The harness is easy to use, utilizes the "human position" of hip flexion, and gives a rapid response.

Continued confusion concerning the place of x-ray in diagnosis is a common reason for delayed treatment in some newborns, and for uncertainty in diagnosis in older infants. We have, therefore, analyzed the role of x-ray in diagnosis, in our patients.

*Read before the joint session of the Sections on Orthopedic Surgery and Radiology, 210th Annual Meeting of The Medical Society of New Jersey, June 7, 1976, Cherry Hill. Both Dr. Paul and Dr. Stuart Hirsch are Assistant Professors of Orthopedic Surgery, Rutgers Medical School, Piscataway.



Figure 1 — Infant with Pavlik harness in place.

Patients Studied

We reviewed our experience in the evaluation of hip dysplasia over a four-year period in 83 patients with a total of 104 dysplastic hips. All patients were under one year of age, were referred by pediatricians, and all had clinical evidence of hip dysplasia, which was confirmed on physical examination by one of the authors.

Infants seen in the hospital newborn nursery are classified as newborns. Others, whenever seen, are classified as "older infants." Twenty-one of our eighty-three patients, or 25.3 percent were seen in the newborn nursery.

Dysplasia occurred nearly equally in right and left hips: 35 percent right, 39 percent left, 26 percent bilateral (Figure 2). Although much of the literature cites an incidence of left exceeding right, our findings are separately confirmed by Carl Hirsch,⁸ Howorth,⁹ Munger.¹⁰ We have no clear explanation for other studies seeming to show a preponderance of left-sided occurrence. Of our patients, 70 percent were female, confirming the generally reported higher incidence in the female (Figure 3).

Physical Examination

All infants were examined for the presence of instability by the Ortolani and Barlow maneuvers^a, for evidence of shortening by the Allis and Galeazzi signs^b, for limited abduction, and for skin fold asymmetry. The Ortolani and Barlow maneuvers are dependent upon capsular



Figure 2—Occurrence of right, left, and bilateral hip dysplasia.

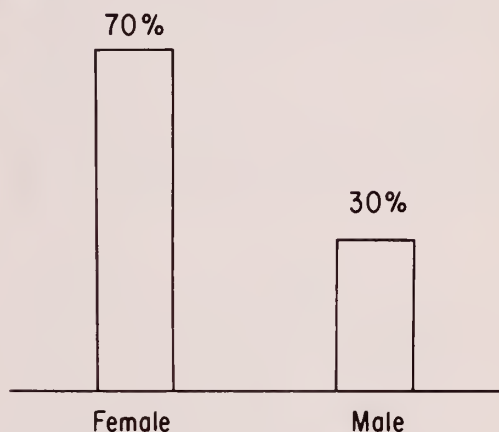


Figure 3 — Female/male occurrence.

laxity to allow dislocation-relocation of the femoral head. The capsule usually tightens within 24 to 72 hours after birth, and then this sign may no longer be obtainable. Failure to elicit this physical change does not necessarily coincide with replacement or reduction of the femoral head. The Ortolani and Barlow signs absolutely confirm a diagnosis of hip dysplasia. When obtained by one competent examiner, the child must be treated, whether or not there is confirmation subsequently by another examiner, or on x-ray.

The remaining classical findings of limited abduction, shortening, and skin fold asymmetry are rarely present at birth and usually occur only after contracture has established itself several weeks later. Since they are present in

^a Tests to demonstrate hip instability.

^b Methods of evaluating for apparent shortening of the femur.

many normal infants, they are not absolute in diagnosis. Therefore, x-ray confirmation is more important when diagnosis is based upon these findings.

X-ray Examination

When the diagnosis is suspected on a clinical basis, x-rays should be obtained in all patients. We have included anterior-posterior (A-P) and frog-lateral films of the pelvis. We measured the acetabular angles, evaluated for displacement and the integrity of Shenton's line, and noted delayed or retarded ossification. We have not frequently measured Hilgenreiner's H&D^c lines. The frog-lateral view was rarely of any use, and we plan to eliminate it from our standard initial films in the future. In a child with subluxable or completely dislocated hips, an x-ray in the treatment device may be important.

We considered and rejected the technique of Andren and VonRosen¹¹ for x-ray diagnosis. This was developed in response to the difficulty in radiologic evaluation in the newborn to obtain radiographic confirmation of a clinical diagnosis. As noted by Mackenzie,¹² this technique involves danger of fracture of the femoral shaft, produces both false positives and false negatives, and provides no additional information. The clinical diagnosis in the newborn by positive Ortolani and/or Barlow signs, is always clear and unmistakable.

Evaluation of the Newborn

All patients seen in the newborn nursery were referred by pediatricians who had obtained positive Ortolani and/or Barlow signs. All were examined on the day of referral by one of the authors and the presence of this sign was confirmed in every instance. All of these patients were x-rayed in the hospital radiology department. We found the usual difficulty in evaluating these films, in part perhaps due to the difficulty in positioning the patient. Although acetabular angles are high in the newborn dysplastic hip, as in the older infant, these films are more difficult to measure and the normal acetabular angles are perhaps slightly higher.

^c The D line measures lateral displacement. The H line measures displacement cephalad.

Because of the positive Ortolani/Barlow signs, the diagnosis was felt to be absolute and certain in the 21 newborn infants. In these patients, x-rays are obtained to rule out other or additional abnormalities. However, an absence of abnormality on the x-ray should not interfere with treatment. The radiologist should avoid the description "normal hips" on films of the newborn (although no definite abnormality may be seen), for this phrase seems to give unwarranted reassurance. A less misleading description might be: "radiologically normal hips; clinical correlation required."

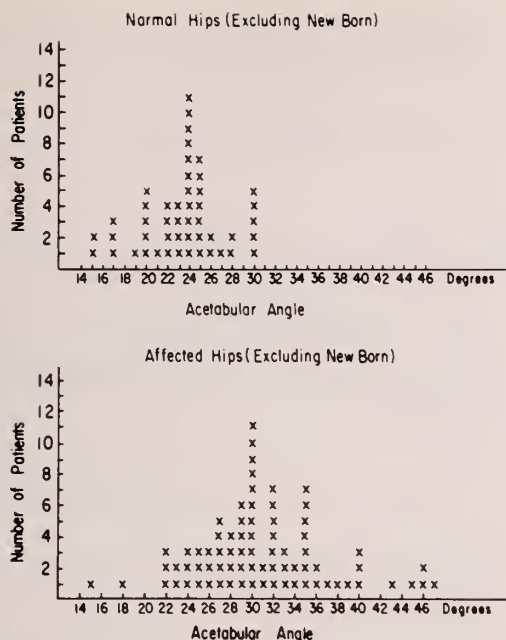
Evaluation of Older Infants

There were 62 patients in the older infant category with a total of 76 dysplastic hips. Immediately after the newborn period, diagnosis becomes very difficult for three months. The Ortolani and Barlow signs disappear. The classical signs of contracture have not yet established themselves. In those patients seen after the newborn period, the average age at diagnosis was 14 weeks. In these, the findings of contracture were evident: that is, limited abduction, asymmetric folds, and shortening. We found x-rays to be extremely helpful in this older age group. The acetabular angle, in particular, is simple, reproducible, and important in diagnosis.

In all of the infants, excluding the newborns, the average acetabular angle for those hips diagnosed as dysplastic was 31°. Using normal hips in those patients with unilateral disease as a control, the average acetabular angle was 23.5° (Figures 4, 5). Although there is overlap in these bell-shaped curves, only 14 percent of the normal hips had acetabular angles greater than 26°, and only 13 percent of the abnormal hips had acetabular angles below 24°.

Analysis has shown the seven and a half degree difference between the averages of the normal and dysplastic hips to be statistically highly significant ($P < 0.001$). That is, after the newborn age, the acetabular angle provides a statistically significant radiological method for evaluating hip dysplasia.

Of other x-ray parameters used, retardation of



Figures 4 and 5—Acetabular angles in normal and dysplastic hips

femoral head ossification has been the most important. Because this is based upon comparison with the normal side, it is not helpful in the evaluation of bilateral disease. Unfortunately, most infants have not yet had ossification when they first present and this finding, therefore, is primarily helpful for diagnosis in much older infants, or for later confirmation. Asymmetry of ossification is never normal; it can occur with positional external rotation of the extremity in the newborn, but this is unusual.

Discussion

In our entire group (excluding one patient who was lost to follow-up and one patient who, at the time of this study, had not yet had ossification) all but one, or 98 percent, had initial or eventual delay in ossification and/or subsequent asymmetry of ossification. Even those treated at the earliest stages showed this, subsequent to the completion of treatment, when ossification occurred.

Shenton's line was interrupted in 51 percent of our patients. This includes newborns, in whom it is rarely interrupted. A combination of delay in ossification, or interruption of Shenton's

line, or displacement, was seen in 100 percent of the patients in whom we made the diagnosis of hip dysplasia. That is, using clinical judgment and acetabular angles to diagnose hip dysplasia, the diagnosis was radiologically confirmed by displacement and/or delayed ossification in all patients.

The acetabular angle, while not absolute, is an important and statistically significant index. Before femoral head ossification appears, it may be the only x-ray evidence of dysplasia. When physical examination has indicated the need for x-ray, a high acetabular angle cannot be ignored. In such cases, the probability of dysplasia is great.

Because treatment is highly effective and benign, all such patients must be treated. The danger to the patient lies in delaying treatment.

Summary

In the newborn infant, the diagnosis of hip dysplasia is by physical examination. Clinicians should carefully perform the Ortolani and Barlow maneuvers, and treat those patients in whom these signs are positive. X-rays should be taken to rule out other or associated anomalies and also should be made of the child in the treating device. A normal x-ray "means nothing" and should not prevent treatment.

After the newborn period, the acetabular angle is the most important single determinant in the x-ray diagnosis of an infant with clinical evidence of hip dysplasia. An acetabular angle of greater than 25° in such an infant is of great significance.

When femoral head ossification is present, inequality is a very important factor in the diagnosis; equality of ossification will usually rule out the presence of infantile hip dysplasia.

Treatment of infantile hip dysplasia is simple, benign, and effective. It should not be withheld when there is indication of the diagnosis. Clinical findings plus a high acetabular angle warrant treatment. In our experience all patients with clinical findings, plus a high acetabular angle, had initial or subsequent confirmation of

diagnosis by x-ray findings (e.g., displacement, delayed, and asymmetric femoral head development).

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Pediatric Brief

Transient Tricuspid Insufficiency of the Newborn: A Form of Myocardial Dysfunction in Stressed Newborns.

Bucciarelli, R. L., et al.: *Pediatr* 59:330 (1977)

Fourteen term newborns (5 diagnosed by catheterization, 9 clinically) presented with a syndrome of cardiomegaly, congestive heart failure (in 9), systolic and diastolic murmurs of tricuspid regurgitation along the lower left sternal border and EKG changes suggesting right atrial and right ventricular hypertrophy with precordial S-T depressions indicating myocardial hypoxia. All but 2 had one minute APGAR scores of less than 6. All were treated symptomatically; 12 had disappearance of all manifestations by age 2 weeks; 2 died of pulmonary complications; autopsy showed microscopic myocardial necrosis.

most of whom had hypoxia during or immediately after birth, is described. Diagnosis usually can be made clinically, although catheterization sometimes is required to differentiate from congenital heart defects. Supportive treatment usually tides these babies over, but the prognosis is not always benign and pulmonary vasodilators may be required. Rowe, in an Editorial Comment in the same issue (pp. 318-321), beautifully reviews all previous reports of what has been blanketed as "persistent fetal circulation" and formulates a symptomatic and etiological classification that is very helpful in making sense out of a confusing situation.

N. Sissman, M.D.

Comment: Another category of transient neonatal cardiac dysfunction in term babies,

Pediatric Cardiologist, Dep't. Pediatrics
CMDNJ — Rutgers Medical School

Carcinoembryonic antigen (CEA) levels were measured in pleural and peritoneal fluids submitted to our laboratory for cytologic examination. The study was undertaken to determine whether the measurement of CEA levels in conjunction with cytologic examination would improve the detection and recognition of cancerous processes in body fluids. The conclusions of our study indicate that CEA test results seem to be most helpful in the presence of nondiagnostic or so-called "atypical" cells in body fluids from patients at risk.

Carcinoembryonic Antigen Assay in Body Fluids

An Adjunct to Cytologic Examination

**Franz Pschibul, M.D. and
W. Hordynsky, Ph.D., East Orange***

The presence of carcinoembryonic antigen (CEA) and CEA-like antigens in plasma, urine, cerebrospinal fluid¹, ovarian cyst fluid², feces, and tissue extracts in healthy persons and in persons afflicted with cancerous disease has been reported widely. *In vitro* biosynthesis of CEA by normal and neoplastic colon tissue has been demonstrated and could readily be measured after its release from the cells³. Elevations of CEA in urine were found in urinary tract infections and with transitional cell carcinoma⁴. The latter investigators undertook urinary CEA measurements and urine cytologic examination and found that the combination of tests gave a better diagnostic yield than the use of either CEA or cytologic examination alone. We undertook a similar approach for the examination of body fluids and applied conventional cytologic methods with simultaneous CEA measurements in order to achieve better results for the diagnosis of recurrent or metastatic carcinoma in body cavities. The difficulty in distinguishing atypical mesothelial cells from neoplastic cells microscopically in body fluids is a well established fact and considerably minimizes the value of cytologic examinations.

Methods and Materials

Pleural and peritoneal fluids from twenty-four patients were examined. A simultaneous CEA assay also was performed on a plasma specimen from each person sampled approximately at the time of the fluid collection. Plasma and body fluids were collected in EDTA vacuum tubes.

The tubes were chilled before and immediately after collection. Centrifugation was performed at 0°C and fluids were frozen at -20°C until used for testing. The dialysis of protein polysaccharide complex with perchloric acid was performed in the bags with molecular weight cut off at 15,000 and any contact with metals was avoided. The CEA was estimated by the radioimmunoassay of Hansen, *et al.*⁵, and RIA by the technical procedure of Roche Diagnostics. Twenty samples of body fluid were examined cytologically by preparing three glass slides (smears) stained by the Papanicolaou method and by the conventional histological preparation of cell blocks stained with hematoxylin and eosin. No cytologic examination was carried out on four cases (#5, #15, #20, #22) because the submitted fluid samples were not accompanied by proper instructions. The cases were included in this study, however, because the CEA levels in the various body fluids were not elevated and because abnormal cytologic results were not expected since the clinical diagnosis did not suggest a malignant disease process. The estimation of the CEA by RIA method and the cytologic and histologic examinations were carried out independently by each investigator.

Discussion

Carcinoembryonic antigen (which is also found in plasma of normal adults) is produced by the embryonic entodermal epithelium and by the

*This study is from the Department of Pathology, The Hospital Center at Orange, where Dr. Pschibul is Director of the Department and Dr. Hordynsky is Consultant in Biochemistry to the Department.

Table 1
CEA Levels in Plasma and Body Fluids with Cytologic Correlation
Plasma Fluid

				(Normal range up to 2.5 ng/ml)		
Case	Age	Diagnosis	Source, Amount	ng/ml	ng/ml	Cytology
1. M	44	Empyema	PL (L) 1000 ml	1.6	3.0	Many WBC
2. M	32	Hemorrhagic necrosis of colon	PL (R) 180 ml	1.2	0.9	Atypical cells
3. F	19	Pancreatitis, acute	P 80 ml	2.2	2.3	Necrotic fat cells
4. M	81	Melanoma, recurrent, invading right chest wall and pelvis	PL (R) N.A.	1.9	2.4	Tumor cells compatible with melanoma
5. M	70	Bronchitis and right pleural effusion, (one year ago right pneumonectomy for bronchial adenoma)	PL (R) 10 ml	1.2	1.2	NA
6. F	64	Breast carcinoma, right	PL (L) 980 ml	16.0	21.6	Carcinoma cells
7. F	71	Breast carcinoma, left	P 380 ml	1.7	2.0	Few tumor cells
8. F	65	Breast carcinoma, right	P NA	12.5	31.2	Few atypical, many mesothelial cells
9. F	65	Adenocarcinoma left ovary peritoneal spread	P NA	2.6	6.4	Tumor cells
10. F	77	Weight loss, chest pain, pulmonary emboli right upper lobe	PL (R) NA	31.2	1.8	Many WBC, mesothelial cells
11. F	67	Carcinoma, ovary	P 1000 ml	2.6	3.5	Atypical cells
12. F	56	Carcinoma, left ovary, postop	P (L) 2700 ml	1.6	1.6	Tumor cells
13. F	57	Breast carcinoma, left	P (L) 500 ml	1.3	2.2	Tumor cells
14. F	81	Pneumonia	PL (R) NA	2.5	4.4	WBC, lymphocytes
15. M	82	Congestive heart failure	PL (R) NA	1.0	0.6	NA
16. F	70	Breast carcinoma, left	PL (L) 1800 ml	40.0	52.0	Cells strongly suggestive of malignancy (Class IV)
17. F	77	Probable carcinoma of ovary	P 1000 ml	0.8	16.2	Many carcinoma cells
18. M	70	Nephrotic syndrome, chest pain	PL (R) 900 ml	2.3	2.3	WBC, many reactive atypical cells
19. F	72	Pulmonary infarcts, massive	PL (R) 210 ml	5.3	1.0	Atypical cells WBC, many
20. F	71	Pulmonary emboli	PL (L) NA	1.2	0.7	NA
21. M	63	Congestive heart failure (aortic valve replacement)	P 400 ml	1.3	1.0	Atypical cells
22. M	64	Chronic liver disease alcoholism	P 600 ml	1.9	1.8	NA
23. M	86	Recurrent carcinoma of sigmoid colon	P 15 ml	15.8	17.0	Biopsy: carcinoma
24. F	55	Pneumonia, pleural effusion	PL (R) 500 ml	1.2	7.6	WBC, many

F — Female
M — Male
NA — Not Available

P — Peritoneal Fluid
PL (L) — Pleural Fluid, Left
PL (R) — Pleural Fluid, Right
WBC — Polymorphonuclear Leukocytes

embryonic genes in neoplastic cells⁶. CEA appears to be a surface constituent of cells which is released into the immediate environment, and then gains access to the systemic circulation. The present investigation was undertaken to detect the CEA in the fluid of body cavities invaded by carcinomatous cells. We were able to demonstrate good correlation in cases #6, #9, #16, #17, #23 where we found elevated levels of CEA in the presence of cancer cells. Two cases (#8, #11) demonstrate that the information on CEA levels in body fluids can be helpful. In both instances the elevated CEA levels pointed in the direction of a malignant process while the cytologic findings were inconclusive. Elevated CEA levels in urine due to inflammatory processes have been reported⁴. This finding is also observed in body fluids generated by inflammatory processes in or around body cavities as demonstrated in cases #1, #14 and #24 where inflammatory exudates showed elevated CEA results in the presence of polymorphonuclear leukocytes. An interesting question was raised by cases #4 and #13 with established tumor diagnosis (pleural) and recurrence. Both patients showed higher levels of CE antigens in body fluids than in the plasma. Although CEA values in the body fluids and plasma were both in low ranges, we wondered whether such slight differences could be meaningful in patients at risk with ambiguous cytologic findings. Perhaps a larger series might clarify this matter. Case #10 was a chronically ill, poorly nourished woman who on a roentgenogram of the chest had abnormal findings in the right upper lobe of the lung. At the time of this report a definite clinical diagnosis was not available and the very high plasma CEA level remained unexplained.

Summary

This study was undertaken to determine whether a combined use of these two laboratory tests for the examination of body fluids enhances the detection of malignant tumor disease. Fluid samples (peritoneal and pleural) from 24 randomly selected patients were

examined cytologically and for CEA levels. CEA levels in simultaneously collected plasma samples were determined for correlation with the CEA values obtained in body fluids. We found very good correlation between elevated CEA levels and the presence of tumor cells in fluid samples.

CEA levels in fluids caused by malignant processes were usually higher than in the corresponding plasma. This we thought was due to dilution. It also appeared that a fluid containing an elevated CEA level in the presence of a significant number of polymorphonuclear leukocytes was suggestive of an inflammatory process.

The combined application of these two tests seems to be most helpful when elevated CEA levels are observed in the presence of non-diagnostic or so-called "atypical" cells. Such findings in a patient at risk seem to favor an underlying malignant process. It is our conclusion that the combined use of these two tests in selected patients gives a better diagnostic yield than the use of either CEA or cytologic examination alone.

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Familial erythrophagocytic lymphohistiocytosis is a rapidly fatal disease for which there is no known successful treatment. The case reported emphasizes the clinical and pathologic aspects of this disorder and is the first known case of a child born of a consanguineous union.

Familial Erythrophagocytic Lymphohistiocytosis

Charles Z. Weiss, M.D., East Brunswick
Donald G. Norris, M.D., Philadelphia*

Scott and Robb-Smith¹ described a clinical entity manifest by fever, anemia, leukopenia, hepatosplenomegaly and lymphadenopathy. The pathologic description of the four cases they reported was characterized by histiocytic infiltration of involved organs with marked erythrophagocytosis. Farguhar and Claireaux², in 1952, described two siblings with a progressively fatal disease having the same clinical and pathologic characteristics, and called it "familial hemophagocytic reticulosis." They emphasized the familial aspects of the disease.

This report deals with a child with this clinico-pathologic entity, born of a consanguineous union and having an unusually fulminant, fatal course.

Case Report

A two-and-a-half year old girl was admitted to St. Peter's Medical Center on February 21, 1975 with a one week history of fever, cough, sore throat, and anorexia. She had been seen one week previously and erythromycin had been prescribed. There was no response to this medication.

The child was the product of a consanguineous union between a 16-year-old, prima gravida female and her 53-year-old father. The child was delivered spontaneously at term after an uneventful pregnancy. She had no postnatal problems. Two subsequent pregnancies of this couple were voluntarily terminated. A fourth pregnancy, of questionable paternity, aborted spontaneously at the 16th week. (Figure 1).

The child had been well prior to admission except for an upper respiratory illness at age three months. Her immunizations were up to date. The physical examination revealed an acutely ill girl with a temperature of 42.1°C. Her blood pressure was 110/80 mm Hg and the heart rate was 110 beats per minute. Respiratory rate was 30 per minute. Positive physical findings included markedly enlarged tonsils with a yellowish exudation. Mild supraclavicular retractions were seen with respirations, and rhonchi were heard bilaterally. Cervical lymph nodes were enlarged, tender, and warm. Pertinent negative findings included an absence of

any skin lesions, no hepatosplenomegaly and an absence of lymphadenopathy other than the cervical nodes mentioned above.

Initial laboratory studies showed a hemoglobin of 12.2 gm/dl, leukocyte count of 16,200/cu mm with 32 percent neutrophils, 62 percent lymphocytes (with a few atypical forms) and 6 percent monocytes. The blood smear was unremarkable. Throat, blood, and urine cultures and serologic studies for bacterial infection were negative. The Monospot® test was negative. Chest x-ray showed a subsegmented atelectasis of the right upper lobe. Urinalysis was negative.

The child continued to have high spiking fever. Repeat blood studies revealed a hemoglobin of 11.0 gm/dl with a reticulocyte count of 0.7 percent; the leukocyte count was 15,000 with 20 percent neutrophils, 78 percent lymphocyte and 2 percent monocyte. The erythrocyte sedimentation rate was 23 mm/hr. The platelet count was 223,000/cu mm.

On the fifth day after admission, the liver was palpable four cm below the right costal margin and the spleen was palpable two cm below the left costal margin. A lumbar puncture revealed a cell count of 1080 red cells, 2 neutrophils and one lymphocyte; smear and culture were negative. Chest x-ray was essentially unchanged. Throat and blood cultures also were negative. The serum bilirubin was elevated to 1.4 mg/dl; alkaline phosphatase was 630 international units; and serum lactic acid dehydrogenase was 720 units.

The child was treated with ampicillin and methicillin with no response.

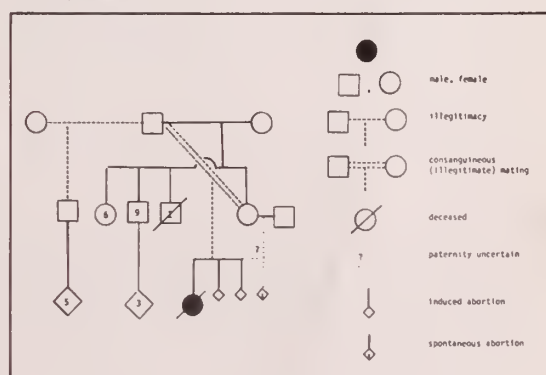


Figure 1

*Dr. Weiss is attending pediatrician, St. Peter's Medical Center, New Brunswick. Dr. Norris is presently affiliated with Children's Hospital, Philadelphia. When this case report was prepared, Dr. Norris was Chief of Pediatric Hematology and Oncology, Rutgers Medical School, Piscataway.

Hematologic studies on the 10th day of admission (March 3, 1975) revealed a hemoglobin of 10.1 gm/dl; leukocyte count was 11,000/cu mm with 43 percent neutrophils, 56 percent lymphocytes and 1 percent monocytes. A bone marrow aspirate was done and was felt to be essentially normal; there was no evidence of histiocytic erythrophagocytosis.

On the eleventh hospital day, an excisional biopsy of a cervical lymph node was done. The pathologic examination revealed a totally effaced lymph node with absence of sinusoids and lymphoid follicles. The cells present were felt to be mostly histiocytes and there was evidence of erythrophagocytosis. There was no evidence of phagocytosis of leukocytes or platelets by the histiocytes. (Figure 2)

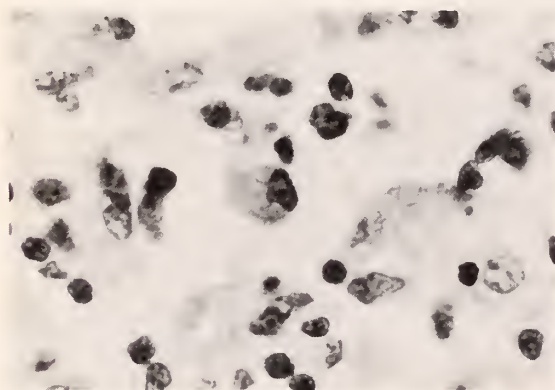


Figure 2

Review of the lymph node biopsy by Dr. W. A. Blanc of the Babies Hospital, Columbia University, New York City, confirmed the diagnosis of erythrophagocytic lymphohistiocytosis.

By the 14th hospital day, the child was still spiking fevers to 40.7°C. She was toxic and in poor condition. Her mucus membranes bled easily. The tonsils were larger than on admission. The posterior cervical lymph nodes were four by four cm in size bilaterally. The liver was five cm below the right costal margin and the spleen was palpable three cm below the left costal margin.

Hematologic studies revealed a hemoglobin of 9.2 gm/dl; leukocyte count was 9,900/cu mm with 43 percent neutrophils, 53 percent lymphocytes and 4 percent monocytes. The platelet count was decreased to 66,000/cu mm.

The child was started on intravenous prednisolone, but by March 13, 1975, her condition had markedly deteriorated; she was transferred to Babies Hospital, New York City. A bone marrow biopsy showed a normocellular marrow. In addition to normal marrow elements, there were many histiocytes with erythrophagocytosis. On March 14, 1975, the child developed shock and expired.

Comment

Erythrophagocytic lymphohistiocytosis is a progressive and generally fatal disease. As the name implies, there is evidence of phagocytosis

of erythrocytes (and other circulating blood elements) by histiocytes in involved organs. Generally, the most prominent organs involved are the liver, spleen, lymph nodes, and bone marrow. The case presented is of interest in that on admission the only evidence of disease was in the tonsils, but the child rapidly developed progressive lymphadenopathy and hepatosplenomegaly. It is also noteworthy that the initial bone marrow aspirate, done on the child's 10th hospital day, showed no evidence of erythrophagocytosis. A bone marrow examination done just 10 days later did reveal evidence of involvement.

The etiology of this disorder is unknown. Its familial nature has been emphasized in previous reports,^{3,5} but, to our knowledge, this is the only child with this disease who was the result of a consanguineous union. Since this child is the only product of the relationship, the true familial nature of the disorder in this particular family cannot be stated. Speculation that this disorder may have as its genesis a maternal fetal "transplant" of histiocytes⁶ is indeed intriguing in this particular case. Fullerton, *et al.*,⁷ reported a five-month-old child with this disorder who had evidence of decreased responsiveness of lymphocytes to phytohemagglutinin, which may also point to some immune defect.

The differential diagnosis in children with massive lymphadenopathy which, on pathologic sectioning, shows replacement of normal nodal structure with histiocytes includes histiocytic lymphoma, histiocytosis X, and Hodgkin's disease. The histiocytes in histiocytic lymphomas rarely show erythrophagocytosis⁸. Histiocytosis X shows cutaneous and osseous involvement, but the pathologic differentiation can be difficult⁸. The histiocytes in familial erythrophagocytic lymphohistiocytosis can resemble Reed-Sternberg cells and, again, differentiation from Hodgkin's disease can be difficult. Warnke, *et al.*,⁸ stress that nucleolar difference in the histiocytes and architectural differences, especially the sinusoid distribution of the histiocytes in familial erythrophagocytic lymphohistiocytosis help to clarify the difference.

There is no known treatment which has an effect on this disorder. The use of a variety of

cytotoxic agents, including those used in most leukemias and lymphomas, has been unsuccessful. Only in the case of Fullerton, *et al.*,⁷ has survival exceeded 18 months.

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American Health Care Improving, Foundation Says*

"Things have changed, and changed for the better. In our pluralistic, sometimes groping American way, many groups, institutions, and individuals have participated in strengthening medical care services in this country. Indeed, in some sectors, remarkable improvements have taken place," they say.

Between 1969 and 1975, physician visits per person per year rose by 19 percent and "This suggests that physicians were more accessible." Low-income people particularly are seeing doctors more often, they say. Black Americans are now seeing physicians as frequently as white. They point out that the physician visit does not necessarily mean better health, but "great efforts have been made to improve access to care, change has occurred, and the change seems to be in the proper direction."

Between 1970 and 1976, medical schools increased the number of physicians in training by 50 percent. In contrast to the 40,000 Americans in medical schools in 1970, almost 60,000

were in training in 1976. Nursing schools have increased their enrollment by 52 percent. The number of dentists is almost 25 percent higher than in 1970.

The article points to various programs that have brought about improvement in the outcome of pregnancy, reduced illness in children, and better organized care of chronic disease.

Between 1968 and 1975, overall death rates dropped by almost 14 percent. From 1960 to 1975, infant deaths dropped 38 percent, from 26 to 16 infant deaths per 1,000 live births, the lowest ever recorded during that 15-year period.

Deaths ascribed to coronary heart disease have fallen 23 percent during the 12-year period from 1963 to 1975. In fact, ten of the first 15 causes of U.S. deaths have declined.

*Rogers DE and Blendon RJ: The changing american health scene. *JAMA* 237:1710, (Apr. 18) 1977.

A retrospective study of newborns admitted to the Neonatal Intensive Care Unit of Children's Hospital of Newark was made between 1972 and 1975. Of 1,182 admissions, 99 neonates were meconium stained and 80 of these had meconium aspiration syndrome. Twenty-four had had tracheal suction upon delivery; 56 had not. Pneumomediastinum and pneumothorax occurred in 33 percent of non-suctioned babies with mortality rate of 18 percent. These complications appeared in only one (four percent) of the suctioned babies with no mortality. In the non-suctioned group, 25 percent of the infants developed seizures and 20 percent required mechanical ventilation, while none of the suctioned infants developed seizures and none required mechanical ventilation. Statistical analysis indicates that immediate tracheal suctioning prior to the first breath contributes to decreased mortality and morbidity due to meconium aspiration.

Meconium Aspiration and Tracheal Suction

**S. C. Sun, M.D., S. Samuels, M.D.,
S. Verasestakul, M.D., D. Onufer, M.D.,
Newark***

The importance of immediate postnatal tracheal suction in meconium-stained babies has been stressed in recent literature.^{1,5} Studies have shown decreased morbidity and mortality due to meconium aspiration in those infants who have had tracheal suctioning immediately upon delivery. This is in contrast to infants resuscitated without prior tracheal suctioning.^{2,5}

In light of these findings, a review was made of admissions to the Neonatal Intensive Care Unit (NICU) at Children's Hospital of Newark from September 1972 to December 1975. This unit is a regional newborn center for northern New Jersey. Most admissions were referrals from surrounding community hospitals within a 50 mile radius of Newark.

Findings

Of 1182 admissions during this period, 99 newborns were meconium stained. Of these, 80 babies had meconium aspiration syndrome. This represents 6.8 percent of our total admissions and 81 percent of all meconium-stained infants. Our criteria for diagnosis of meconium aspiration syndrome include: (1) a meconium-stained infant with evidence of meconium in the trachea, regardless of amount; (2) tachypnea, (3) tachycardia, (4) x-ray findings of hyperinflation of the lungs, and (5) scattered

areas of lobular or lobar atelectasis, with or without pneumomediastinum and pneumothorax.

In general these newborns were well developed, term or post-term babies. The average gestational age was 40 to 41 weeks; only three babies were less than 38 weeks and 22 babies greater than 43 weeks of gestation. The weights averaged 3,288 grams, four weighed less than 2500 grams; eight weighed more than 4000 grams. (Table I)

Table I

*Newborns — Neonatal ICU
Children's Hospital of Newark
September 1972 — December 1975*

	Inborn	Outborn (Transported)
Total Patients	331	871
Meconium stained	38	61
Meconium in trachea	26	54
Gestational age (mean)	41 wks.	40.5 wks.
Birth weight (mean)	3323 gms.	3253 gms.
Low apgar score (<6)	14 (54%)	34 (63%)
Complication of labor	10 (39%)	18 (33%)

*This study is from the Department of Neonatology, Children's Hospital, and the New Jersey College of Medicine, CMDNJ, Newark. Dr. Sun is Assistant Professor of Pediatrics, New Jersey College of Medicine, CMDNJ, and Director of Neonatology, Children's Hospital, Newark, where Dr. Samuels is Senior Pediatric Resident and Dr. Onufer is a Fellow in Neonatology. Dr. Verasestakul is Clinical Assistant Professor of Pediatrics, New Jersey College of Medicine, CMDNJ.

Twenty-six of the 80 cases with meconium in the trachea were born at Children's Hospital where tracheal suctioning at birth is a routine procedure practiced by a neonatal fellow or a senior pediatric resident. Our resuscitation procedure requires that all meconium-stained infants should have their naso-oropharynx suctioned prior to the delivery of the shoulders and have their trachea suctioned upon delivery with a size 10 catheter prior to the first breaths. No positive pressure ventilation is applied before thorough clearance of meconium from the trachea and main stem bronchi. Of these cases, 54 were referred from community hospitals where tracheal suction was not performed at birth. Fourteen of 26 inborn babies (54 percent) had low Apgar scores (less than six at 5 minutes), as compared to 34 or 54 (63 percent) out-born infants. Complications of labor occurred in 39 percent of inborn and 33 percent of out-born infants. (Table I).

Infants with meconium in the trachea regardless of the quantity and quality (thick or soupy) were divided into suctioned and non-suctioned groups. In the suctioned group, the naso-oropharynx was suctioned at birth, the trachea was not suctioned until the arrival of our transport team; usually hours after birth. Of 80 neonates with meconium in the trachea, 24 belong to the suctioned group and 56 to the non-suctioned group. Pneumomediastinum and/or pneumothorax occurred in 19 (33 percent) of the non-suctioned group with a mortality rate of 18 percent. In contrast only one (4 percent), developed these complications in the suctioned group, with no mortality. (Table II) Eleven neonates (20 percent) in the non-suctioned group required mechanical ventilation. Seizures occurred in 14 non-suctioned infants (25 percent) of which six expired. None of the suctioned group required mechanical ventilation and none developed seizures.

Discussion

Meconium aspiration syndrome is a disease of the mature infant. It is postulated that fetal hypoxia causes vasoconstriction in the gut wall⁶ and stimulates intestinal parasympathetic ganglia.⁷ This produces hyperperistalsis and anal sphincter relaxation. Since the parasympathe-

Table II
Complications Related to Trachea Suctioned
or Trachea Not Suctioned

	Trachea suctioned	Trachea not suctioned
Meconium in trachea	24 (All inborn)	56 (54 Outborn) (2 inborn)
Pneumomediastinum	0	6
Pneumothorax	0	10
Both	1	3
Mechanical ventilation	0	11 (20%)
Seizure	0	14 (25%) (6 expired)
Death	0	10 (18%)
Chi square test	P < 0.01 P < 0.02 P < 0.01 P < 0.05	for pulmonary air leak for mechanical ventilation for seizure for death

tic ganglia mature distally only at term⁸, intra-uterine meconium passage is rarely seen in the preterm infant. Only three babies in our series were less than 38 weeks of gestation. Correspondingly, fetal distress is often associated with post-maturity because of the increased incidence of placental insufficiency due to placental aging. In our series, 22 percent (22 out of 99 meconium-stained infants) were of more than 43 weeks gestation. Passage of meconium *in utero* is often associated with postnatal complications.^{1,2,9} Fetal hypoxia is believed to cause gasping of the infant prior to delivery and this results in aspiration of meconium into the naso-pharynx and oropharynx but probably not beyond the trachea. Gooding, *et al.*,⁹ injected meconium into individual amniotic sacs of undelivered puppies and also into the oropharynx and mouth of the puppies before the first breath. The meconium was not aspirated. Even intra-uterine gasping, when the uterine artery was clamped, did not result in aspiration. Rather, the meconium could be identified in the corners of the mouth and at the side of the oropharynx. No meconium was evident in the lungs. If the litter was too depressed to initiate breathing because of maternal premedication with barbiturate, the meconium was not aspirated. This indicates that aspiration of meconium beyond the trachea and bronchi occurred at the time of the first and subsequent breaths. If the neonate is vigorous and makes a strong inspiratory effort at birth, the meconium which is already in the

oropharynx is aspirated further into the tracheo-bronchial tree and is spread diffusely to the lungs. Aspirated meconium obstructs the air passage, causing atelectasis where bronchi are totally obstructed, and adjacent compensatory hyperinflation because of a ball-valve effect where bronchi are partially obstructed. Rupture of emphysematous blebs most often causes pneumomediastinum and pneumothorax, but occasionally may produce pneumopericardium, pneumoperitoneum or interstitial emphysema, when positive pressure is applied without prior tracheal suction. In our series, the incidence of pneumothorax and/or pneumomediastinum was 33 percent (19 out of 56) in non-suctioned babies and the mortality rate was 18 percent (4 out of 19). In suctioned babies, the incidence of this complication was 4 percent (1 out of 24) and all survived. Complications occurred, in spite of tracheal suction, in one case. This particular infant, being most vigorous at birth, cried immediately and aspirated a mouthful of meconium before tracheal suction could be carried out. In contrast, infants born depressed allow time for suctioning prior to the first breath, thus aspiration of meconium and resulting complications can be prevented.

Serious sequelae of partial or total air-way obstruction are hypoxia and seizures, often with permanent hypoxic brain damage. Fourteen of 56 non-suctioned infants (25 percent), developed seizures during the first days of life. Six of these expired. In at least five out of the 14 infants who developed seizures, they were clearly documented to be secondary to postnatal anoxia. These five cases did not have signs of fetal distress, i.e., their Apgar scores were above six at one minute, and other causes of seizures such as hypoglycemia, hypocalcemia, hypomagnesemia, hypo or hypernatremia, central nervous system hemorrhage, or pyridoxine deficiency had been ruled out. In retrospect, if these five infants received tracheal suction at birth, seizures and brain damage could have been prevented. None of the infants in the suctioned group developed seizures.

Chi square analysis of the results showed statistically significant differences in mortality ($p < 0.05$), in pulmonary air leak ($p < 0.01$); in

seizure ($p < 0.01$); and in requirement of mechanical ventilation ($p < 0.02$); between the suctioned and non-suctioned babies. These statistical analyses indicate that immediate tracheal suction prior to the first breath did contribute to decreased mortality and morbidity due to meconium aspiration. Hence it is concluded that all meconium-stained infants should have thorough suctioning of the naso-oropharynx by an obstetrician or an assistant as the head is delivered and before the shoulders appear. Thereby, one can avoid meconium aspiration due to negative intra-thoracic pressure generated by shoulder recoil upon delivery. Secondly, tracheal suctioning by an attendant pediatrician or an anesthesiologist should be done immediately upon delivery, prior to the first breath. Thirdly, an infant with meconium aspiration requires close observation and intensive care, with transfer as soon as possible to an NICU where optimal respiratory care facilities are available.

Summary

Meconium aspiration syndrome is a preventable disease. Complications resulting from air-way blockage due to meconium aspiration are preventable. Retrospective analysis of 80 newborns with meconium aspiration strongly suggests that pulmonary complications such as pneumomediastinum and pneumothorax can be prevented by thorough naso-oropharyngeal suction at birth and tracheo-bronchial suction prior to the first breaths. Maintenance of a clear air-way also prevents hypoxic brain damage secondary to postnatal airway obstruction.

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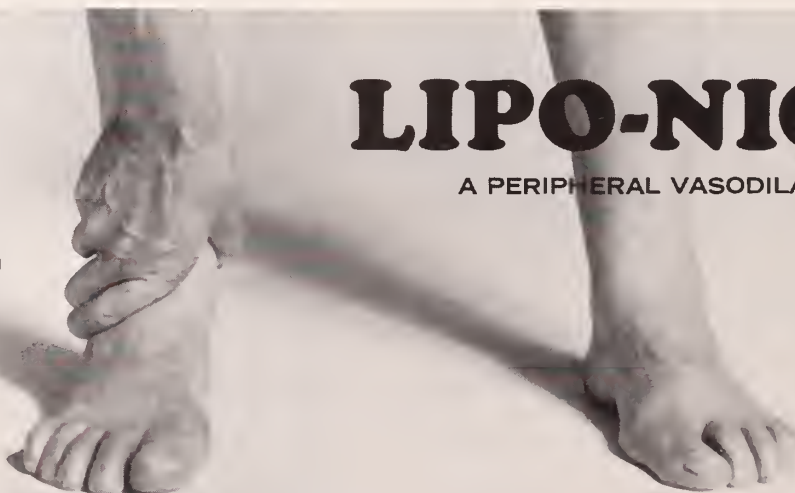
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CASE REPORTS

The phenomenon of cluttering is characterized primarily by an increase in the rate of speech with faulty rhythm. Cluttering previously has not been recognized as a sign of neurologic illness, but has been described primarily as a lifelong, "constitutional" speech alteration. A patient with multiple sclerosis who demonstrated symptomatic cluttering as an acquired abnormality is presented.

Symptomatic Cluttering:

An Overlooked Neurologic Sign*

**Elizabeth L. Molinari, M.S. and
Matthew Menken, M.D.,
New Brunswick**

Cluttering, or tachyphemia, is a disability of language formulation that characteristically shows an increase in the rate of speech with faulty rhythm. Because of elisions, iterations, and transpositions, the speech is difficult to understand, and is often misdiagnosed as stuttering. Cluttering is thought to occur on a congenital, inheritable, and "constitutional" basis¹, and only rarely has been described in acquired neurologic illness². Indeed, most adult neurologists are not familiar with the speech disorder known as cluttering and often assume that a patient with rapid speech is anxious or tense during the examination. Because patients with cluttering may not complain about this sign, it will be overlooked unless the physician specifically asks about it. We wish therefore, to report a patient who had multiple sclerosis, one feature of which was cluttered speech.

Case Report

In 1963 a 37-year-old woman had optic neuritis which resolved in a few months, dragging of the left leg for one month in 1967, and increasing leg weakness since 1973. In the past two years she had marked difficulty with her speech, which became extremely rapid and difficult to understand, especially when she was under stress. On the telephone, for example, her speech was almost unintelligible. She was neither aphasic nor dysarthric; rapid movements of the tongue and lips were normal, as was the production of repetitive sounds. Several factors appeared to contribute to the defective verbal pattern: frequent omissions of sounds, syllables and words; inconsistent slurring and articulation breakdown, addition of irrelevant words; marked variability in the rate of speech. Thus, "I guess I got the nerve problem from her. I presume I'm a very nervous person also," became "I guess I got the nerve prob her from her, presume, a very nervous also."

Neurologic examination revealed temporal pallor of the left optic disc, a spastic/ataxic gait, hyperactive deep tendon reflexes and a positive Babinski sign on the left. Vibratory sensory perception was decreased in the toes and ankles, position sense was slightly impaired in the toes, but pin prick and crude touch were normal. She had abnormal heel-to-shin tests bilaterally and abnormal finger-to-nose tests. Her spinal fluid protein was 25 mg/dl with the IgG 15 percent of total protein (1973).

Discussion

In neurologic practice, pathology interfering with articulation will slow the rate of speech in almost all instances. Thus, diseases of the cerebral hemispheres, brainstem, cerebellum, peripheral nerves, myoneural junction, and muscle, produce characteristic alterations of speech that include a slowing of rate. Indeed, with the exception of Parkinsonism and other disturbances of the basal ganglia, an increase in the rate of speech is thought to be rare. It is of some interest, therefore, that our patient with multiple sclerosis did not have dysarthria or scanning speech, but instead displayed an increase in the rate of speech as well as the other features of cluttering (*vide infra*) which caused her considerable embarrassment and disability. Her friends constantly complained about her rapid speech and asked her to slow down. On the telephone she was unable to order merchandise, and often had to repeat herself three or four times to be understood. The patient, her family, and her friends verified that her speech was completely normal before she developed the neurologic illness. Throughout her schooling, she had no disorder of speech.

The objective rate of speech is difficult to measure and has received little attention. When

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normal American speakers produced less than 140 words per minute, most listeners thought the rate of speech was too slow according to Frauhe.³ However, when it was greater than 185 words per minute it was considered too fast. Kelly and Stier reported that the mean rate of extemporaneous speech was 160 words per minute.⁴

Cluttering

Cluttering has been described in the literature within the setting of learning disability and has been said to have an hereditary basis or to have a psychologic (constitutional) basis⁵. A standard textbook of speech pathology⁶ does not mention cluttering in acquired neurologic illness, and discounts brain pathology as an explanation for cluttered speech of either the congenital or acquired variety.

Arnold¹ identified five abnormalities of cluttered speech: (1) dysarthric pattern of breathing, (2) abnormal phonation, usually presenting as a monotonous speech melody, (3) an objectively increased rate of speech (4) faulty rhythm of speech, (5) literal, syllabic, and verbal transpositions and substitutions, particularly the skipping of unstressed syllables and the replacement of major word particles with the indifferent schwa. In childhood cases, an associated dyslalia often is seen.

Certain clutterers have been prominent individuals in public life⁷. The late Senator Kenneth S. Wheery spoke so fast that he made frequent errors of speech, that came to be known as "Wheeryisms." These included: "Opple Amportunity," "Chief Joints of Staff," and "belldoor ringer." Another well known clutterer, the Rev. W. A. Spooner of New College, Oxford, spoke of "The two great English poets, Kelly and Sheets." "The Lord is a shoving leopard (loving shepherd)," "Sew her to a sheet (show her to a seat)." The Oxford English Dictionary defines a "Spoonerism" as

an accidental transposition of the initial sounds, or other parts, of two or more words.

The patient here reported had normal speech in early life, but demonstrated cluttering as an acquired phenomenon within the setting of multiple sclerosis. She had no dysphasia and no dysarthria. A pathologic basis for this phenomenon, as opposed to a psychological reaction to her disease process, cannot be proved and will have to await the finding of cluttering in other neurologic patients. Furthermore, the possibility exists that some cases of childhood cluttering may derive from an encephalopathy, rather than a psychological process. Our experience, since recognizing cluttering in our patient suggests that it is not a rare phenomenon, but one that frequently has been overlooked as a normal speech variant. When it is present, cluttering is easy to recognize, and neurologists who are familiar with this phenomenon will be able to identify it without difficulty. Because it may be disabling and embarrassing, such patients should be referred to speech pathologists for evaluation and treatment.

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This case demonstrates many of the effects stemming from fresh-water near drowning. Epidemiology and animal studies in fresh and sea water are presented. Complications, including hypoxia, fluid overload, infection, cerebral edema, hemolysis, hyperkalemia and arrhythmias, are discussed in relation to our patient.

Near Drowning in Fresh Water

Stephen A. Anish, M.D., Wayne

Epidemiology

Approximately 140,000 persons in the world die annually from drowning or from the sequelae of drowning.¹ In the United States, drownings account for 10 percent of all accidental deaths, claiming more than 8,000 lives per year. Drowning without aspiration (dry drowning) accounts for 10 to 20 percent of all drowning accidents. Wet drowning, by contrast, results in fluid entering the lung and has much more serious consequences. Children are the chief victims of drownings with 47 percent of them being four years of age and younger.²

Submersion in Animals

Initially, there is a period of breath holding which lasts one to three minutes. The victim then makes a violent inspiratory effort, but laryngospasm occurs and protects the pulmonary airways. The water is swallowed, but then one of two events commences. If the larynx relaxes before hypoxia causes respiratory paralysis, water and gastric contents are aspirated. However, if laryngospasm continues until apnea occurs, the lungs remain dry. Once apnea occurs, the victim stops swallowing.

Sea Water vs. Fresh Water Drowning

The two types of water cause different effects because of their osmotic variation. Sea water is 3.5 per cent sodium chloride, which causes an osmotic gradient across cell membranes. Fresh water, on the other hand, is hypotonic and freely traverses into the interior of the cell. Thus, the pulmonary edema of sea water drowning is due to extravasation of fluid, while that of fresh water is due to an abrupt fluid overload and rise in pulmonary hydrostatic pressure. When small amounts of fresh water are aspi-

rated, pulmonary surfactant is altered. It is known that alveoli which are deficient in normal surfactant are unstable and prone to collapse.³ In addition, it is postulated by Pattle⁴ that these surfactant deficient alveoli frankly leak fluid.

Report of a Case

A 14-year-old male was rescued after submersion in a nearby lake for an unknown period. Rescue efforts were delayed because of the remoteness of the area. The victim was brought to the emergency room 45 minutes later in a semicomatose state.

Initial vital signs revealed blood pressure 116/70, pulse 100, shallow respirations with a rate of 20, temperature 100.4. The patient was arousable but confused. Fine rales were audible at the right base of the lungs. Heart rate was regular, with no murmur or gallop. The abdomen was soft with no masses palpable. Urine was port wine in color. Blood gas studies: pH 7.41, PaO₂ 38, PaCO₂ 33, plasma HCO₃ 21, Hct. 42. Urine analysis: sp.gr. 1.021, albumin 3+, gross blood present, coarse granular casts. WBC 7000, 73% polys, 19% lymphs, 5% basos, 3% monos, platelets adequate. LHD 300. Serum electrolytes: Na 135, K 3.6, Cl 100, BUN 17. Later blood gases on 60% O₂ were PaO₂ 86, PaCO₂ 32, pH 7.38. Serum creatinine 0.9. Creatinine clearance 3 days later was 167 cc/min on a 2,620 volume. Later urine analysis: clear yellow, acid, negative for albumin, 1-2 WBC, 2-4 RBC, no casts seen. Chest x-ray on admission: scattered fluffy alveolar densities in both pulmonic fields. Initial ECG showed sinus tachycardia; repeat was within normal limits.

The patient was treated in the Intensive Care Unit with constant cardiac monitoring. Nasogastric tube was inserted and removed two days later. Mannitol in a dose of 25 grams was given intravenously. Hourly urinary output was 200-300 cc initially. The color returned to normal within six hours. No significant rise in serum potassium or drop in hematocrit was noted. His mental status cleared rapidly. Two million units of penicillin were given intravenously every six hours. Solumedrol® 40 mg., was given intravenously every 12 hours for three days. Chest x-rays showed total resolution by the fifth day. The patient was ambulated and discharged six days after admission.

Discussion

This case points out some critical areas of fresh-water near drowning. Initial PaO₂ was below 50 mm Hg and a rebreathing mask was needed. In

some patients, intubation and 100 percent oxygen using a volume ventilator with PEEP may be needed. Short high-dose corticosteroids are useful to counteract the alveolar exudate of aspiration pneumonitis. Prophylactic antibiotic therapy with penicillin is helpful. Rapid diuresis with furosemide or mannitol will mobilize the increased intravascular volume.

Frequent chest roentgenograms are essential. Our patient did not, but some cases of fresh-water near-drowning demonstrate frank congestive failure; careful monitoring of the central venous pressure or pulmonary artery pressure using a Swan-Gans catheter may be necessary. Prevention of gross fluid overload will depend on the amount of fresh water aspirated or swallowed and the rapidity with which the gastric contents can be emptied. Most people feel that congestive failure results from the absorption of large amounts of hypotonic water from the stomach. Hemolysis results from an obvious change in osmotic pressure surrounding the red blood cell, i.e., a hypotonic state. Fresh-water drowning has been reported to result in active hemolysis, hyperkalemia, hemoglobinuria, and anemia.⁵ Rapid osmotic diuresis is helpful in preventing the formation of hemoglobin casts. Constant monitoring of serum potassium, hemoglobin, and hematocrit are essential. Hyperkalemia should be treated.

Cerebral edema may result from a variety of causes including hypoxia, fluid overload, and congestive failure. Rapid treatment and re-establishment of PaO_2 above 60 seems critical. Steroids may help.

Late deaths are usually caused by ventricular fibrillation, infection, or complications of cerebral hypoxia. A constant monitoring of the electrocardiogram and readjustment of the serum potassium, oxygen, and osmotic factors will prevent the consequences of ventricular irritability.

Foreign material in the pulmonary tree frequently results in secondary infection. Initial therapy with penicillin has been discussed, but lack of infiltrate resolution may require reassessment and change in antibiotics.

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Sacrococcygeal teratoma occurs once in 40,000 live births. Benign lesions affect females more often than males and are usually diagnosed before the age of two months. Differential diagnosis is discussed. Surgical extirpation of these tumors is attended by two important pitfalls: inadequate excision and hemorrhage. Methods for avoiding these complications are presented. A recently encountered case in a four-week-old female is reported.

Benign Sacrococcygeal Teratoma

Ralph S. Greco, M.D., Piscataway*

Teratomas may contain a variety of cell masses mimicking organs such as pancreas, brain, kidney, muscle, bone, and intestine. These tissues grow in a disorganized fashion and organ growth is rare. Gross pathology is extremely variable but typically these tumors contain cystic and solid components. The cysts may contain clear fluid but hemorrhage into them is common. The following case report is illustrative of some of the problems associated with the management of this condition.

Case Report

A four-week-old female was noted to have a cystic mass on the right buttock at two weeks of age. Weekly follow-up examinations showed an increase in the size of this mass so she was admitted to Raritan Valley Hospital for evaluation. On admission her vital signs were normal; weight was 4600 gms. There was a 4x3x2 cm. soft, ballotable mass on the right buttock at the level of the coccyx but lateral to the midline. There was resistance to abduction and flexion of the right hip. An orthopedic consultant felt that the limitation of motion at the hip joint represented dysplasia unrelated to the coccygeal lesion. Initial hemoglobin was 10.3 gms. and all biochemical values were within normal limits. Plain x-rays of the pelvis revealed abnormal calcification. Intravenous pyelography and barium enema showed displacement of the rectum and bladder anteriorly by a presacral mass (Figure 1). A small bowel series showed superior displacement of the intestine by the mass. Sonography demonstrated a cystic component of the mass but failed to demonstrate its presacral extension.

On April 26, 1976, after placement of a large polyethylene catheter in the left basilic vein, exploration was performed. An inverted V-shape incision just posterior to the anus was used. The cystic mass was subcutaneous except for a thin covering of attenuated gluteal muscle fibers. Dissection was carried around the cyst until its entrance into a large solid presacral mass was noted just below the coccyx and then laterally and inferiorly until the most caudal extension was dissected free of the rectum. This dissection was continued superiorly until the mass was completely free of the rectum. At this point the sacrococcygeal joint was transected and the mass delivered out of the pelvis. Two large presacral arteries were ligated and the mass removed. Estimated blood loss of 50 cc. was replaced with an equivalent volume



Figure 1—IVP and barium enema showing anterior displacement of the rectum and bladder. Abnormal calcifications can be seen near the sacrum.

of whole blood. There was no evidence of invasion of the rectum, bladder, or sacrum. Because of thinning and fragmentation by the tumor, the levator sling was reapproximated in the midline and sutured to the presacral fascia. The glutei were similarly reapproximated in the midline. Redundant skin was excised creating a vertical midline extension of the original incision and the wound closed over two small penrose drains (see Figure 2). The postoperative course was uneventful except for a fever which disappeared on the third postoperative day. There was normal return of bladder and rectal function. The child was discharged on the eighth postoperative day.

Grossly, the lesion was an 8x6x4 cm. solid mass to which a 4x3x1.5 cm. cyst was attached. The entire lesion weighed 52 gms. Microscopically, the tumor was a benign teratoma containing a cystic and solid constellation of brain, epithelium and glandular structures, pancreas, connective tissue, fat, lymph and bone (see Figure 3).

Discussion

Teratomas are neoplastic since their growth bears no relationship to general body development. Nevertheless, there is a clear relationship

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Figure 2—The healing incision after removal of drains. The transverse incision has been altered to give this final result by excising the redundant skin. The vertical extension in the gluteal crease gives an excellent cosmetic result.



Figure 3—A microscopic section showing tissue which resembles normal pancreas.

to normal embryogenesis. The favored theory of their development is that a small group of totipotent cells becomes sequestered from the mainstream of normal cellular differentiation². This explanation is particularly compelling in the sacrococcygeal lesion whose midline position is in close proximity to the point at which one of the primary organizers of the embryo, Hensen's node, comes to rest.

Teratomas may be found in the head and neck, mediastinum, and retroperitoneum. Ovarian teratomas are the most frequent of all, but occur in the prepubertal child. Testicular teratomas are very rare. Sacrococcygeal teratomas, the most common lesion in the newborn period, occur only once in 40,000 live births³.

Some two hundred cases have been reported. Their histological pattern is the same as that of teratomas in general. Certain biological characteristics are helpful in determining the presence of malignancy. Internal lesions confined to the presacral space and solid tumors are most frequently malignant. The large, bulky, external lesion is usually cystic and benign. Males with a teratoma are much more likely to harbor a malignant tumor; a female infant with a teratoma noted at birth has a 91 percent chance of its being benign¹. However, if the mass is discovered after the age of two months this excellent prognosis changes to only a 16 percent probability of benignancy in the female and almost 100 percent malignancy in the male.

The question of malignant degeneration of sacrococcygeal teratomas has been the subject of a lively debate. The fact that those discovered early are usually benign and those appearing later in life usually malignant has led to the suggestion that such a change does occur and that early operation is necessary to forestall such a dire outcome. It is probable that such a policy is good for the child and family but that such a histological alteration occurs rarely.

Differential Diagnosis

The differential diagnosis of the long list of pericoccygeal lesions warrants some discussion². Neurogenic tumors, enterogenous cysts, chondromas, giant cell bone tumors, lipomas, and meningoceles, are a few which can be confused with the teratoma. The latter is particularly troublesome as a failure to recognize communication with the dura can be fatal. Radiological evaluation is a great help in making this differentiation. Extension into the presacral space, especially with displacement of the bladder and rectum, is unusual except in teratomas. The latter also contains calcifications much more commonly than the other lesions described. Finally, the meningocele is usually associated with abnormalities of the sacrum rarely noted with the neoplastic processes.

In the end, however, all sacrococcygeal teratomas will require surgical intervention which is well planned and timed in an atmosphere in

which the surgical and pediatric team is prepared for any eventuality.

Surgical Treatment

Surgical extirpation of sacrococcygeal teratomas is attended by two important pitfalls: inadequate excision and inadequate blood replacement, although the latter usually can be avoided easily. A venous cutdown always must be in place and blood typed and crossmatched prior to the start of surgery. Complete excision at the first operation provides the best chance for cure. Inadequate resection in benign teratoma is usually the result of unfamiliarity with the condition. All tumors about the buttocks must be approached as if they entered into the presacral space and operation conducted accordingly.

The great majority of sacrococcygeal teratomas can be approached posteriorly with the child prone over a cloth roll to elevate the hips. A vaseline pack placed in the rectum is of great value in identifying and preventing accidental injury to that organ. A curved transverse incision is usually placed several centimeters posterior to the anus to allow reconstruction of the perineum. It is important that the gluteal muscles, even if severely thinned, be preserved. In large lesions this can be accomplished best by incising them in the midline, reflecting them with the skin flaps and thus preserving their blood supply.

By meticulous sharp dissection the inferior and lateral margins of the tumor can be identified until the rectum comes into view. Superiorly, the dissection is carried to the coccyx. We prefer to delay transection of the coccyx until the entire tumor is freed from the posterior rectal wall which can be identified easily by the presence of the pack in its lumen. At this time, the coccyx is disarticulated from the sacrum and the arterial blood supply via the lateral sacral arteries, which always course along the anterior aspect of the sacrum, is doubly ligated and transected. After this the danger of blood loss is averted so the remainder of the tumor, even those with pelvic extension, can be removed from below. In rare cases where this cannot be done, a combined abdomino-perineal approach

can be utilized at the time of the initial procedure or later.

A number of strategic facts concerning the effect of the tumor and its excision on vital pelvic structures are important. In cases such as this one, with impingement of the tumor on the bladder neck, careful dissection of the tumor and visceral walls will avoid permanent damage to pelvic nerves. Bowel function is preserved if careful attention is paid to reconstruction of the levator sling. Its point of posterior fixation, the coccyx, must be removed to effect complete extirpation of the tumor. Therefore, the muscles must be reunited in the midline and fixed to the anterior sacral fascia. If the levators have been so thinned by tumor or destroyed during dissection the perianal levator cuff should be brought up and sutured to the sacrum. Finally, the rectum itself should be fixed to the sacral fascia to restore the normal sacral convexity. Gluteal muscles must be resutured in the midline to avoid serious cosmetic defects. Similarly, the redundant skin should be excised and closed transversely with a vertical extension in the gluteal crease when possible (see Figure 2). Drainage with simple penrose drains is best, suction rarely being necessary in the newborn. Nursing in the prone position, though tedious, is helpful in reducing fecal contamination of the wound.

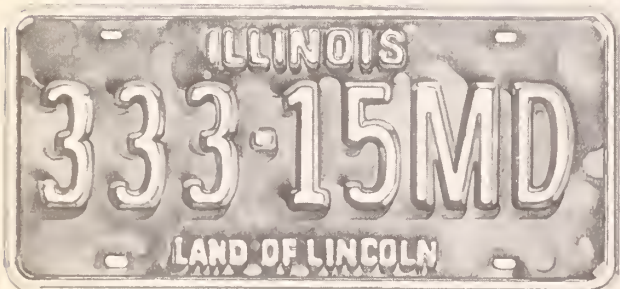
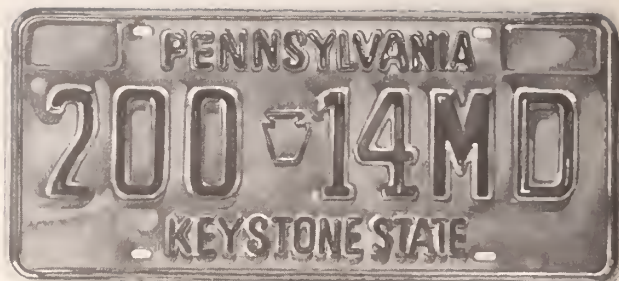
Prognosis

The prognosis in sacrococcygeal teratoma is excellent providing the basic tenets of preoperative evaluation, intraoperative management and postoperative care are strictly adhered to. The most important aspect of management is that undertaken in the operating room itself where meticulous dissection, provision for blood replacement, excision of the coccyx and careful inspection insure complete removal of the tumor.

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* **WRITE FOR REPRINT:** R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and Female Climacteric, *Drug Therapy*, Sept. 1976.

Is there a true aphrodisiac? How effective are androgens in the management of the male climacteric and male impotence? Article discusses the psychophysiological and hormonal changes in the elderly male and female and therapeutic considerations. The effectiveness of methyltestosterone in the management of male impotence was confirmed by a cross-over, double-blind study using a placebo and Android-25

(methyltestosterone 25 mg.), on 20 males, 50 years of age or older who complained of secondary impotence. Patients received a series of placebo then Android-25, or Android-25 then placebo as follows: 1 tablet/30 days; 2 tablets/30 days; 3 tablets/30 days. Sexual response was evaluated: 0 = no change; + = 25% improvement; ++ = 50% improvement; +++ = 75% improvement. Placebo effectiveness was + or ++ in 12.7% of trials. Android-25 elicited a +, ++ or +++ response in 47.2% of trials. There was often a dose related response not observed with the placebo. This effect was not observed in younger patients (age 28-45 years).

DESCRIPTION: Methyltestosterone is 17 β -Hydroxy-17-Methylandroster-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunuchism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-pubertal cryptorchidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, which have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric,

avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE**

REACTIONS: Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. In the male: Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpubertal cryptorchidism, 30 mg. **REFERENCE:** Robert B. Greenblatt, M.D., and D. H. Perez, M.D.: "The Menopausal Syndrome," *Problems of Libido in the Elderly*, pp. 95-101. Medcom Press, N.Y., 1974. **HOW SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

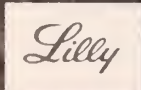
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Radiation Complications — Are They Manageable?

To all of us, radiation "reaction" means burned skin, fistulous communications and other ugly, undesirable reactions. Complications of radiation, either immediate or remote, are seen more and more as we achieve higher dosages, with the development of higher energy machines. Late effects of radiation are seen because cancer patients survive intensive treatments.⁹ The earlier radiation complications were seen as a consequence of the use of superficial and orthovoltage machines which did not have a "skin-sparing" property. "Skin-sparing" means that the surface of the skin gets less cumulative radiation than the underlying tissues. Radiation therapists, who had only these treatment machines could not deliver present-day tumoricidal dosages, i.e., 5,000 up to 8,000 rads or more externally.

The more common radiation reactions observed include the following:

1. *Loss of hair, especially from the head.* This often occurs in radiation of the whole head. Sparse regrowth might occur within six to twelve months, while more hair will grow after twelve months, as long as the patient is not receiving chemotherapy. The patient should not expose his or her head to the sun because of the possibility of aggravating the radiation reaction. Complaints include itchiness of the scalp, erythema or flaking, which can be treated by small amounts of vaseline or Keri Lotion® applied to the scalp.

2. *Skin reactions.* Erythema of mild, moderate, or severe degree may appear and may lead to wet or dry desquamation. We prefer dry desquamation because it is more easily handled than a wet, oozing condition. We prescribe cornstarch for those irradiated areas; if it should become very dry, a small amount of Keri Lotion® or vaseline may be applied to keep the skin mildly moist.

After a considerable length of time, depending on the dosage and the manner in which the radiation was given, subcutaneous fibrosis may set in. In this condition, indurated skin is palpated at the site of radiation. The patient may complain of a "pulling sensation," a

"funny feeling," or itching. "*Noli me tangere*" ("touch me not") should be the rule. The application of cornstarch usually results in a comfortable feeling. If an adverse reaction is seen or felt in the buttocks, refrain from giving injections of steroids or antibiotics at this site. What used to be an indolent reaction might flare up and ulcerate. Any heat application or prolonged pressure to the irradiated, fibrotic area should be avoided.

If the patient's skin breaks down several months or years after radiation therapy, notify the radiation therapist who gave the treatment. He should be able to give advice. A radiation-induced skin ulcer heals slowly. Usually, application of gentian violet stops the oozing, makes the skin firmer, and promotes healing. Of course, the presence of infection is to be eliminated. Debridement of the necrotic tissue may be necessary, but one has to be gentle. If conservative measures fail, plastic surgery may be required. The plastic surgeon should know the borders of the radiation field in order to avoid cutting through the irradiated area, since the healing might be compromised. The surgeon who plans to operate in an irradiated area should avail himself of the diagram of the areas treated and the total tumor dose given.

3. *Fistulas and sinuses.* These complications may appear several months to years following radiation treatment of conditions like carcinoma of the urinary bladder in which 6,000 to 6,500 rads are given³; cancer of the prostate in which as high as 7,000 rads may be delivered to the prostate gland⁷; gynecologic tumors in which radium insertions or implants play a large role^{5,8}; or head and neck tumors where up to 8,000 rads externally can be given.^{2,5} Fistulas and sinuses may need surgical correction depending on the general condition of the patient.

4. *Radiation enteritis.* During radiation treatments to the abdomen or pelvis, the patient should be placed on a low-residue diet, with or without Lomotil® (phenoxybate HCL with atropine sulphate). The number of bowel movements is usually minimized by this approach. Enteritis sometimes occurs months after radia-

tion therapy, but the treatment approach should be conservative. One must be alert for intestinal obstruction, which needs immediate surgical correction because of high mortality when perforation and peritonitis occur. The incidence of intestinal obstruction due to adhesions increases if radiation is given post-operatively.

5. *Radiation cystitis.* This may appear as dysuria, frequency of urination, or hematuria. Conservative management includes increasing water intake, acidifying the urine, administering smooth muscle antispasmodics, urinary bladder anesthetics, and antibiotics for specific infections. If hemorrhagic cystitis becomes intractable, electrocauterization of delicate vessels with a ball-tip electrode with a current barely sufficient to produce searing of the capillaries can be tried first. Some advocate the instillation of formalin, but this is not without its complications.¹⁰ An ileal conduit may be necessary to rest the bladder mucosa. In instances in which 6,000 to 6,500 rads are delivered to the urinary bladder in an attempt to cure the patient, bladder contracture is an accepted risk. This leads to frequent, scanty urination and may require urinary diversion.

6. *Radiation colitis.* Mild to moderate radiation colitis can be managed conservatively by keeping the stools soft with hydrophilic agents and plenty of liquids to avoid constipation. Rectal bleeding should be managed conservatively at first with blood transfusions, stool softeners, and so on. A barium enema x-ray is not recommended because the procedure stretches the colon and its capillaries and more bleeding will occur. One should not biopsy the rectum, if possible, because the wound may not heal and may lead to a fistula. The use of barium with tannic acid should be avoided. Steroid enemas usually have not been successful. A diverting colostomy sometimes has to be done to allow recovery of the irradiated colon.⁴

7. *Osteoradionecrosis.* The mandibular area is susceptible to this complication. Here, poor dental hygiene and dental trauma play a major role. The integrity of the overlying soft tissues has to be maintained at its best by removal of improperly fitted dentures, abstinence from

hot beverages and tobacco. If the bone is exposed, one should try conservative management such as frequent salt and soda irrigations, zinc peroxide packs, and powder spraying.¹ Operative intervention is usually necessary when pain is present. If pain is not present, the conservative management is justified even if it requires months.

Summary

Morbidity and complications of radiation are seen since cancer patients survive for long periods because of aggressive, radical treatments. For this reason, radiation oncologists should follow their patients. If a patient has had radiation treatments and is beginning to show complications, the primary physician should treat him conservatively and consult the radiation oncologist, who should be able to give advice and also follow the patient.

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NEW JERSEY DOCTORS' NOTEBOOK

President's Farewell Address

John S. Madara, M.D.*

This past year has been a full one—and one I'll never forget. It began with a sad note when I assumed the presidency on May 4, 1976 after the sudden and shocking death of Doctor John McGuire. It assumed reality on June 6 when I addressed this House of Delegates and urged it to start our nation's third century with four qualities—Freedom, Faith, Feeling, and Fun. It gathered momentum which culminated in the formation of our own captive insurance company, at a special meeting of this House on December 1, 1976. It then coasted along with a few peaks and valleys. One of the peaks was the approval of the guidelines for the care of comatose patients; one of the valleys was the close but unsuccessful attempt to have our malpractice package passed by the State Senate. All in all, my year as your President was a rewarding one to me.

Of the qualities I had hoped to see reassured the one I was most concerned about—Freedom—is still difficult to maintain. There is increasing encroachment in the practice of medicine, with increasing non-professional assessment, regulation, and control of our professional activities by outsiders. The alphabetic list of those who control our fees, our practice, our education, and even our ethics runs like this: BHI, CON, EPA, FDA, FTC, GAO, HCFA, HEW, HMO, HSA, IPA, IRS, MAC, NHI, PSRO. There are two concerns I have about this incursion of non-professionals in the care of patients. One is the continuing effort to use physician-extenders in direct patient care. If these extenders are trained and licensed to perform services under professional supervision, well and good. But when untrained individuals assume the role of diagnostician, there's a real temptation to usurp the therapeutic role. It is difficult for dentists or pharmacists measuring blood-pressure not to suggest therapy. It is even harder for a physician's

assistant not to give advice after doing a history and physical examination. To see mental hospitals under the control of layman administrators is the epitome of frustration. It behooves us to continue to fight for the principle that medical decisions should be made by medical people, since we're already losing control over our fees, our advertising, and our right to buy expensive equipment.

Another concern is the growing use of planners and schemers to discuss *ad infinitum* new systems for health care, grandiose models of patient management, and idealistic schemes for futuristic fulfillment of a bureaucrat's dream. I left one of these meetings in Trenton this winter feeling as Walt Whitman did writing his poem "When I Heard The Learn'd Astronomer" (just substitute the word "planner" for "astronomer"):

When I heard the learn'd astronomer,
When the proofs, the figures, were ranged in columns
before me,
When I was shown the charts and diagrams, to add,
divide, and measure them,
When I sitting heard the astronomer where he lectured
with much applause in the lecture-room,
How soon unaccountable I became tired and sick,
Till rising and gliding out I wander'd off by myself,
In the mystical moist night-air, and from time to time,
Look'd up in perfect silence at the stars.

Meetings like this confirm the old saying: "Those who can, practice; those who can't, plan."

In contrast to my concern about our freedom is my Faith in most of my fellow physicians. I've had opportunity to visit over half our county medical societies this past year, and I've been impressed with the sincerity with which our members try to get things accomplished. Granted, we all don't think alike, and some counties let us know that more loudly than others. I know by the letters I've received that all of our actions during this past year have

*Delivered before the 1977 House of Delegates, MSNJ, second session, May 15, 1977, Atlantic City.

not been received with applause, but most of the writers give us credit for trying to work for the benefit of all rather than the aggrandizement of a few. In spite of our problems with professional liability insurance, most physicians are truly concerned with the individual care they give their patients. It is heartening to read that a recent Gallup poll places physicians at the top of the list of professionals most respected and trusted.

Only a small fragment of our profession is convicted of fraud and abuse. Webster defines fraud as "unlawful deceit" and abuse as "misapplication." The very makeup of Medicare and Medicaid is ripe for abuse (even by those who control it), but there is no excuse for a doctor who charges for services not rendered, for visits not made, or for laboratory work not done. Our profession must keep its house clean, set standards to live by, and discipline those who practice deceit.

As to my own faith, it has been confirmed this past year. I could not have kept up the pressure of travel, meetings, letters, and decisions, and still maintain a private practice without the help of a power greater than myself. My belief in a God who cares for me and my patients has been a vital force in sustaining my sanity and my safety. And to Him I give my thanks!

The third quality is Feeling (or compassion). The great danger of cook-book medicine, and defensive practice is the temptation to treat the illness rather than the patient. I recall a lady who complained about her husband's physician: "He treated his disease well, but didn't care about him." One of the most controversial bills this past year has been the "Patient's Bill of Rights." What it really does (after three revisions) is to assure the patient's right to know what he has, how it's treated, the tests to be done, the consultants to be called, the fees to be paid, the type of surgery and anesthesia required, and the freedom to choose another physician. I have read some "informed consent" forms that would scare me out of an operation. The best "informed consent" is an eyeball-to-eyeball explanation by the surgeon

to the patient of what to expect, followed by proper documentation that this has been done.

One of my real concerns is how much to tell a patient. I think a physician has the inherent right to withhold harmful information; this is where complete access to medical records presents a problem. Should a patient know a consultant's opinion of his mental stability? Need a patient see an educated guess as to how long he'll live? Let me tell you a personal story of how I learned the hard way that telling the whole truth can hurt. My older son urged me to read a segment of Franz Kafka's *A Country Doctor* called "Eleven Sons," in which he describes the strong and weak points of his eleven boys; each has an asset and each has a flaw. Two of these portraits reminded me of my two sons. After much coaxing, and against my better judgment, I told my son which one resembled him and which one reminded me of his brother. The next morning I found this note scribbled on the kitchen blackboard in typical college jargon: "I oughtn't have asked. You shouldn't have told."

He had been hurt — more by the one I picked out for his brother than by the one depicting him. But it made me realize there are certain things that should be kept secret. We all learn and often record in our histories unbelievable events, scandalous happenings, and shocking tragedies that should be kept confidential, because their divulgence might damage the trust between physician and patient. I urge you to keep this trust intact.

The last quality is Fun. I admit this has been the most exciting and rewarding year of my life. To have served this Society in our country's bicentennial year has been an unprecedented experience. Being at the helm of The Medical Society of New Jersey has been a labor of love. Doctor John McGuire gave it his life; I've given it my heart, my brain, and almost gave it some of my blood when I fell asleep driving and almost totaled my car. But it all has been worth it! This is a great medical society, and for the privilege of serving it this past year, I give you my deepest thanks.

Trustees' Minutes

April 17, 1977

A regular meeting of the Board of Trustees was held on Sunday, April 17, 1977, at the Executive Offices, Trenton. Detailed minutes are on file with the secretary of your county medical society. A summary of significant actions follows:

AMA Program on Negotiations . . . Approved a two-day, AMA-sponsored program on negotiations to be held October 29 and 30 at a location to be determined. Curriculum and faculty are provided by the AMA without cost to MSNJ. Invitations will be extended to physician and executive leaders of county medical societies and specialty societies.

Council on Legislation . . . Approved the recommended positions of the Council on Legislation on the following bills of medical interest, with the exceptions noted:

- S-1674* — Menza, *et al.* — Mental Health—Creates within Institutions and Agencies a Division of Mental Health Legal Counseling and Assistance. The substantive action of the bill goes beyond that title, however, since Division personnel will become involved in rendering advice to patients in any matter related to diagnosis, treatment, and care including consents, denials, facility transfers, etc. *DISAPPROVED*, because persons neither capable of rendering mental health services nor legally licensed to do so will be rendering decisions in diagnosis and treatment. Currently developing PSRO and quality assurance programs are well suited to protect and foster appropriate patient care.
- S-1675* — Menza, *et al.* — Competency to Stand Trial—This bill is designed to produce a format detailing when an individual is competent to stand criminal trial. Along with its companion bill *S-1676* which addresses the issue of culpability it produces a drastic departure from existing case law and would recognize the theoretical defense of "irresistible impulse." *DISAPPROVED*, because the different background training and clinical experience of the psychiatrist and the psychologist result in two different kinds of expertise which cannot be equated either in terms of the diagnosis or treatment of illness.
- S-1676* — Menza, *et al.* — Criminal Responsibility—This bill is designed to produce a change in the definition of Criminal Responsibility. It produces a drastic departure from existing law and would recognize the defense of "irresistible impulse." This bill, as its companion bill *S-1675*,
- would equate the psychiatrist and the psychologist and would restrict expert testimony to those two disciplines. *DISAPPROVED* (same as *S-1675*)
- S-1677* — Menza, *et al.* — Involuntary Civil Commitment—(Because of extensive Senate Committee amendments it is suggested that the Board of Trustees refer this bill back to the Council on Legislation for further consideration).
- S-1687* — Dunn—Good Samaritan Act—This bill would amend the Good Samaritan Act to grant immunity to persons participating in mobile intensive care teams. *APPROVED*
- S-1706* — Beadleston—Early Detection of Hypothyroidism—This bill provides for a screening process for hypothyroidism in newborns. The State Department of Health is to institute and conduct all necessary laboratory tests. *ACTION DEFERRED*, pending further information from the Council on Public Health.
- S-1719* — Menza—An Act Establishing A Mental Treatment Standards Committee—The proposed committee will consist of 7 New Jersey residents, one psychiatric social worker, 2 psychiatrists, one psychiatric nurse, the Director of the Division of Mental Health and Hospitals, one administrator of a community mental health facility, and one licensed psychologist. The Committee shall prepare a recommended "Manual of Adequate Standards for Treatment of the Mentally Ill in State Mental Institutions." The standards recommended by the Committee shall be expressed in as objective terms as possible. This also creates a Patient Treatment Review Board, consisting of one psychiatrist, one non-psychiatrist M.D., one licensed psychologist, one psychiatric R.N., and one licensed attorney. The Board shall review patient complaints and recommend such action as may be necessary to compel adequate treatment. *ACTION DEFERRED*, pending further information from the Council on Mental Health.
- S-1720* — Hagedorn, *et al.* — Creates a commission to inquire and study the spiraling costs of hospital care and to evaluate the effectiveness and existing cost containment. There is no provision for physician representation. *APPROVED*, with recommendation to the sponsor that *at least one physician* be appointed to the Commission.
- Note:* Italics indicate Board amendment.
- S-1747* — Russo—Smoking Within Health Care Facilities—Requires health care facilities to adopt policies regulating smoking, i.e., designated areas and prohibitions—public posting. *APPROVED*
- S-1748* — Russo—An Act concerning the Practice of Medicine and Surgery—Amends the existing advertising statutes to allow physicians to place reasonable signs within proximity of their offices, but not necessarily on the same building. *APPROVED*

S-1751 — Martindell—Living Will—Provides that persons over 18 may execute legal documents directing that in the event of a terminal illness no maintenance medical treatment may be utilized to prolong life. "Terminal Illness" is certified to in writing by the attending physician. Physicians certifying terminal illness or relying upon the instruction of the executed document are immune from civil or criminal liability if acting in good faith. *NO ACTION*

S-1758 — Skevin, McGahn, *et al.*—Cancer Incidence Registry—Declares cancer to be a reportable disease under the Public Health Council Statutes and requires the maintenance of a cancer incidence registry. *APPROVED*

S-1801 — Russo—Motor Vehicles—Provides that all drivers of motor vehicles have given implied consents to blood and urine chemical tests to determine the presence of drugs or alcohol in the individual's system. Refusal to consent to the test involves an automatic suspension of driving privileges. *APPROVED*

S-3022 — James Wallwork—Computerized Axial Tomography Unit—Requires physicians in private practice to acquire a Certificate of Need in order to purchase a CAT Scanner. *ACTIVE OPPOSITION*, because this bill poses an infringement upon the private practice of medicine.

S-3034 — Skevin, McGahn, *et al.*—Cancer Detection—Authorizes the Commissioner of Health to develop a program for the detection, diagnosis and treatment of cancer, including research. Also provides for a "training program for paramedics in cancer detection." Appropriates \$500,000. *APPROVED*

S-3035 — Skevin, McGahn, *et al.*—Establishes a "Cancer Control Act." Authorizes the Commissioner of Health and Environment with the approval of the "Cancer Control Council" (no physician representation—nor scientific for that matter) to regulate the manufacture, sale, and labeling of products which have a carcinogenetic effect. Appropriates \$500,000. *ACTION DEFERRED*, pending further information from the Committee on Cancer Control.

S-3055 — McDonough—Professional Liability (Same as A-2375)—This bill was drafted by the Monmouth-Ocean Medical Society project. It contains a number of very favorable concepts which have thus far proved to be unacceptable to the legislature, i.e., an absolute two-year occurrence on the Statute of Limitations, a limitation on pain and suffering compensation which is recoverable only when caused by a willful or grossly negligent act, a limitation on punitive damages of \$100,000.

Other areas of difficulty are:

(1) All providers of health care must carry professional liability insurance (limits are not specified).

(2) Only when insurance covering liability is reasonably available as determined by the

Commissioner shall a provider be liable for malpractice. (No Court, Legislature, or Regulator would allow this clause to be operative.)

(3) Standards are directly correlated to PSRO geographic areas. Changes in PSRO areas would result in different standards and Federal repeal or amendment of PSRO may result in chaos. Also physicians practicing in more than one PSRO area would have a multiplicity of standards with which to comply. *ACTION DEFERRED*, pending the outcome of the current legislative session. (It was recommended that a letter be addressed to the Monmouth and Ocean County Medical Societies explaining the Society's position on this bill)

S-3123 — Russo—Clarifies the Good Samaritan Act to clearly cover a call on an in-hospital emergency. *APPROVED*

S-3125 — Imperiale, Davenport, Buehler, Bedell—Traditionally, the most complete and extensive courses of instruction in emergency services had been the "Five Point" system conducted by the American Red Cross, the National Safety Council and others. Recently a program of emergency training services has been implemented by the State which combines the elements of the "Five Point" system into one program. This State certification has now been accepted by first aid, rescue and ambulance squads to the point of exclusion of the "Five Point" system. This bill would equate the two programs. *APPROVED*

S-3140 — Martindell—This bill addresses the problem of the high cost of many prescription drugs by a twofold approach. It provides for the dispensing by pharmacists of lower-priced, generic substitutes for prescribed drugs in a strictly regulated manner, and authorizes the advertising of prescription drug prices. *APPROVED*

A-1659 — Bassano—To require females to take serological tests, prior to issuance of a marriage license, to determine if they ever had rubella. *DISAPPROVED*, because this type of legislation is unwarranted, at this time, since in view of recent inoculations, only 17 reported instances of rubella-associated birth defects occurred in the U.S. last year.

A-2032 — To establish a Physician-Dentist Loan Redemption Program for students of the College of Medicine and Dentistry and to appropriate \$20,000 for administrative costs. *CONDITIONAL APPROVAL*, pending suggested amendments.

A-2242 — Visotcky—Requires prescribers of medications to indicate whether or not the nature of a drug should be indicated on the label and whether or not a generic equivalent can be dispensed. *APPROVED*

A-2283 — Lefante—Chiropractic—Creates an independent board of chiropractic examiners—five licensed chiropractors and one public member. Would remove jurisdiction of the State Board of Medical Examiners. This bill does not alter the scope

of chiropractic licensure. *ACTIVE OPPOSITION*, because the bill establishes a separate licensing board without demonstrating the need therefor.

A-2356 — Froude — Restrictive Covenants — Precludes physicians and professional services' corporations from having an enforceable restrictive covenant upon termination of employment or withdrawal from a partnership. *APPROVED*

A-2375 — Maguire, *et al.* — Professional Liability (Same as S-3055) — This bill was drafted by the Monmouth-Ocean Medical Society project. It contains a number of very favorable concepts which have thus far proved to be unacceptable to the legislature, i.e., an absolute two-year occurrence on the Statute of Limitations, a limitation on pain and suffering compensation which is recoverable only when caused by a willful or grossly negligent act, a limitation on punitive damages of \$100,000.

Other areas of difficulty are:

(1) All providers of health care must carry professional liability insurance (limits not specified).
(2) Only when insurance covering liability is reasonably available as determined by the Commissioner shall a provider be liable for malpractice. (No Court, Legislature, or Regulator would allow this clause to be operative.)

(3) Standards are directly correlated to PSRO geographic areas. Changes in PSRO areas would result in different standards and repeal or amendment of PSRO may result in chaos. Also physicians practicing in more than one PSRO area would have multiplicity of standards with which to comply. *ACTION DEFERRED*, pending the outcome of the current legislative session. (It was recommended that a letter be addressed to the Monmouth and Ocean County Medical Societies explaining the Society's position on this bill)

A-2409 — Newman — Grants injured and ill employees the right to select their own physicians under the Workmen's Compensation Act. *APPROVED*

A-2419 — Doyle — This bill extends implied consent to blood specimens in situations when the police so request and the "operator is unconscious." *APPROVED*

A-3055 — Froude — Medicaid Reimbursement — Amends the Medicaid law to provide that providers who are private practitioners shall not be reimbursed at a different rate than providers who are "nonprofit agencies." *APPROVED*

A-3043 — Pellecchia — Medicaid Eligibility — Extends Medicaid coverage to the medical needy (those with an income 1-1/3 above categorical public assistance). Also amends the law to enable the Division of Medical Assistance to assess and collect incorrect or illegal payments and penalties (currently a function of the courts). *CONDITIONAL APPROVAL*, pending further clari-

fication of the bill regarding legal safeguard amendments i.e. due process, rights of individuals, etc.

A-3067 — Martin, *et al.* — Physician-Dentist Loan Redemption — Permits New Jersey students who are willing to serve in areas designated by the Commissioner of Health as "medically underserved" to redeem as much as 85% of their accumulated loan indebtedness for 3 years of service. There is an awesome amount of power placed in the hands of the Commissioner in regard to manpower distribution. Some of the provisos of this Act, if not carefully implemented, may run counter to the 1964 Civil Rights Act and the U.S. Constitution. *DISAPPROVED*, in favor of A-2032.

A-3068 — Jackman — Optometry — Declares as a violation of the licensing act the location of an optometric practice in such proximity to an optical establishment in a manner which confuses the consumer as to the independence of the optometric practice. *NO ACTION*.

ACR-189 — Proposes to amend the New Jersey Constitution to provide that a majority of the members of the professional boards shall be members of the public and not engaged in the practice of the profession being regulated. (Does not affect the State Board of Bar Examiners or the State Supreme Court.) *CONDITIONAL APPROVAL*, provided all professions requiring licensure are included.

Bills Noted and Filed

SCR-3002 — Skevin — Memorializes the Governors and Legislators of Connecticut, New York and Delaware to form along with New Jersey a Regional Cancer Control Commission.

SCR-3003 — Skevin — Memorializes the President and the Congress to take appropriate acts to protect the health and well-being of the citizens of the United States from environmental carcinogens.

SR-32 — Skevin, McGahn, *et al.* — Commission on Incidence of Cancer — Adds two Senators to the Commission on the Incidence of Cancer. (There are currently six Senators so serving.)

ACR-185 — Requests the State Commission of Investigations to investigate the State Mental Health and Prison system.

AR-38 — Hurley, *et al.* — Obstetrical Surgical Facilities — Memorializes the Department of Health *not* to implement Obstetrical/Surgical Regionalization regulations until public hearings have been held.

Note: Italics indicate Board amendment.

Council on Mental Health . . . Approved the following recommendation from the Council on Mental Health:

That the report of the Ad Hoc Committee on New Jersey Mental Health Planning, which was accepted in its entirety by the Council on Mental Health, be forwarded in its final form, with a covering letter containing a simplified explanation of the report, to New Jersey Senators and Representatives, members of the New Jersey Senate and Assembly, health service agencies, State Health Coordinating Committee, county mental health boards, mental health committees of county societies, New Jersey Psychiatric Association, American Psychiatric Association, New Jersey Mental Health Association, New Jersey Association of Mental Health Administrators, New Jersey Chapter of the American Hospital Association—Regional Board, New Jersey Association of Chosen Freeholders, Department of Human Services, and the chairman of the board of each hospital.

Committee on Conservation of Vision . . . Approved the following recommendation of the Special Committee on Conservation of Vision:

That the Eye Health Screening Program be conducted in 1977 during the week of September 25.

Committee on Finance and Budget . . . Approved the report and the following recommendations from the Committee on Finance and Budget:

1. That those members of the Executive Committee and/or those officially representing The Medical Society of New Jersey approved by the Executive Committee be compensated at \$100 per day over and above travel expenses.

2. That the current policy which provides payment of Annual Meeting expenses by MSNJ for designated officers and others be extended to include the Chairman of the Board of Trustees, effective with the 1977 Annual Meeting.

3. That the Board of Trustees authorize that the sum of \$25,000, allocated in the 1976-77 budget, be paid to the Academy of Medicine of New Jersey.

4. That up to \$25,000 be included in the budget of the Committee on Medical Education for 1977-78 for post-graduate educational programs and activities, and that the Committee, with the concurrence of the Board of Trustees, be empowered to expend up to this amount in the course of the administrative year, on the basis of need reflected in the 1977-78 fiscal report to be submitted to the Committee on Finance and Budget.

5. (a) That up to two-thirds of the Professional Liability Fund be invested in higher yielding investments extending out two (2) years.

(b) That the advice and expertise of the New Jersey National Bank's Trust Department be utilized, as is the current policy, with MSNJ's investment portfolio.

6. That the 1978 per capita assessment be set at \$120; that of the \$120 per capita assessment, \$5 and \$2.50 be designated respectively for the member's *Journal* subscription

and Annual Meeting registration; and that the full amounts realized as of May 31, 1978 be applied in 1978.

7. That the Board of Trustees approve a 1978 special per capita assessment of ten dollars (\$10) to serve as a grant to the New Jersey Foundation for Health Care Evaluation; that this special per capita assessment be set in addition to, and not part of, the budgetary assessment; and that both be paid at the same time.

Membership in More than One State Medical Association . . . Voted to allow dual membership in state medical associations, in conformity with the guidelines of the AMA. The Board felt that a physician applying for dual membership should designate which state society should be given credit for his membership in the count for AMA delegates.

Conference of Presidents and Presidents-Elect . . . Considered the following, at the conclusion of a presentation (to the Board, in meeting with the Conference of Presidents and Presidents-Elect) on the diagnosis-related group concept by Mr. R. E. Jamieson, HRET Vice-President for Information Systems:

(1) a still *unsettled claim* submitted to the Advisory Committee to Review MSP and HSP Disputed Claims, which Dr. Donnelly offered to assist in resolving;

(2) the *status of the Garramone and Maguire bills*—the "reporting bill" (S-1245) and the "patients' bill of rights" (S-1242) have passed the Senate; the four remaining Garramone bills are scheduled for vote the week of April 25th; a public hearing will be held on the Maguire bill (A-2375—to establish the Health Care Malpractice Liability Act);

(3) an inquiry concerning the *identity of Mr. Joseph Katz*, who, it was explained, is a professional lobbyist associated with Mr. Edward Meara;

(4) *input to the Board of Directors of the Medical Inter-Insurance Exchange of New Jersey*—it was explained that the Underwriter, who performs services for the Exchange, is wholly owned by MSNJ; the members of the Exchange are the policyholders and owners of the Exchange (the doctors insuring each other); the Board of Governors of the Exchange was appointed by the Chairman of the Board of Trustees of MSNJ to serve for one year and consists of 17 physicians (no laymen); election of subsequent members will take place at the annual meeting of the Exchange;

(5) *membership renewal*—the Board has taken under advisement a county representative's suggestion that a conference be held on the state level concerning members who may not renew membership for monetary reasons;

(6) *prescription substitution bill (A-2021)*—it was pointed out that MSNJ supports the bill and it was noted that the legislation assures the prescribing physician of ultimate control over the product dispensed;

(7) *workshop*—a suggestion was made that MSNJ conduct a workshop for state and county medical societies highlighting specific issues, as a means to improve communication;

(8) an emergency resolution from the Bergen County Medical Society—*Blue Cross Reimbursement for In-Office Pre-admission Testing*—which would permit Blue Cross payment for pre-admission testing of patients in the office of the patients' personal physicians;

(9) concern over the errors in the recently released *list of HEW Medicare payments to physicians* who earned \$100,000 or more from Medicare in 1975; Mr. Maressa will discuss the matter with the Office of General Counsel of the AMA.

Report from the Foundation

Daniel J. O'Regan, M.D., Medical Director

In the course of its activities, this Foundation deals with many governmental agencies, on the state level as well as federal. There is continued representation by NJFHCE personnel on committees of the New Jersey Department of Health. These committees include: Confidentiality, the Technical Advisory Committee on Health Data, Elements of Cost, Alternate Coverage, Alternative Health Delivery Systems, and Health Maintenance Organizations. Our point of view in these relationships is always that of the practicing physician. Most of these committees have no physician membership except the Foundation representative. The exchange of ideas is useful in a variety of ways. A series of meetings between PSRO representatives and John Reiss, Ph.D., Assistant Commissioner for Health Planning and Resource Development, exchanged information on the PSRO information system and the Diagnosis-Related Group (DRG) concept. The latter is being developed by the Department of Health as a tool to be used in prospective rate-setting for hospitals. The concepts of peer review and quality assurance, which are PSRO priorities, are essential to any total review system.

The above are a few examples of representation of physicians by the Foundation which we feel is an important service to organized medicine. It complements the relationships which MSNJ and NJAOPS have with other agencies. Our full-time involvement provides continuing participation on an ongoing basis.

CMDNJ Notes

Stanley S. Bergen, Jr., M.D.
President, CMDNJ

RMS Expansion

There is good news concerning CMDNJ-Rutgers Medical School. The Liaison Committee on Medical Education has approved (subject to conditions which we expect to meet without difficulty) increases in the school's third and fourth-year class sizes that could reach the sought-after 108 by 1979. Immediately the approval permits an increase from the present third-year level of 56 to 78 for next fall. The conditions entail incorporating an affiliated hospital as a core teaching hospital in medicine and surgery and additional faculty resources in other clinical departments to permit expanded enrollment in other affiliates. We are well on the way to satisfying these requirements and have recruited students for the additional openings.

The next step would increase the size of the third-year class to at least 90 in the fall of 1978. Then, upon satisfying the committee that the school has met further specified requirements, up to 18 students could be enrolled the following year.

Obviously, we are pleased with this development. The CMDNJ-Rutgers Medical School, it will be recalled, was originally constituted as a two-year school, which meant that all of its students had to go elsewhere to complete their degree requirements. The first step in turning the school into a four-year institution came in 1972 when we were able to keep 32 students for the third year. The first M.D. degrees were awarded to CMDNJ-Rutgers Medical School students in 1974, and the number grew in subsequent years. However, we still lost nearly half the entering class after the second year. The College and the CMDNJ-Rutgers Medical School faculty administrators have been working hard to correct that condition and we are proud to have achieved that goal.

Commencement—June 6, 1977

In addition to the 252 degrees awarded to CMDNJ students at the June 6th graduation

ceremonies, the College presented honorary doctor of science degrees to Franz J. Ingelfinger, M.D., and Henry Goldman, D.M.D., both of Boston. Dr. Ingelfinger, a gastroenterologist and editor of the *New England Journal of Medicine*, was cited for his contributions to research in his field. Dr. Goldman, dean of the School of Graduate Dentistry of Boston University, was honored for his service to medical and dental science.

It is gratifying to note the number of graduates and Fifth Pathway students—145—who are remaining in New Jersey for postgraduate training. Fifty-eight of the group have chosen programs based at the CMDNJ-Martland

Medical Center, Newark, and 12 will train at CMDNJ-Rutgers Medical School Affiliated Hospitals which includes a half year at the CMDNJ-Raritan Valley Hospital, Green Brook.

Experimental Pathology Program

The CMDNJ-Graduate School of Biomedical Science has instituted a new advanced degree program in experimental pathology. The new program, leading to a Ph.D. degree, has received the approval of New Jersey's Board of Higher Education. Concerned with the effects of disease in man, it will prepare students for research in pathology and for teaching.

Member physicians interested in photography, who wish to have their work considered for use on the *Journal* cover or elsewhere are encouraged to send a glossy of their choice to *The Journal*, MSNJ, P.O. Box 904, Trenton 08605. Pictures of rectangular shape are preferred. Photos will be returned, *if requested*.

Joan L. Gehring



Mrs. David A. Gehring, the former Joan Lotz, of Woodbury, is the new President of the Medical Society of New Jersey Auxiliary. Married to a cardiologist, who is also director of medical education at the Underwood Memorial Hospital, Mrs. Gehring is the mother of two daughters and four sons.

Since joining the Auxiliary of the Gloucester County Medical Society in 1963, she served many chairmanships and offices ultimately becoming president of that organization in 1970. She rose through a similar series of offices at the State level, culminating in her current position as President of the State Auxiliary.

Joan Gehring was graduated from the Presbyterian School of Nursing in Pittsburgh and is presently attending Eastern College where she is studying psychology and health administration. A lady of many interests and hobbies, including oriental dancing and tennis, she has been involved actively in numerous organizations such as the Woman's Board of the Underwood Memorial Hospital, the General Federated Woman's Club, the Central Baptist Church of Woodbury, The Visiting Homemaker Service, Easter Seal Society, the Tri-County Heart Association, and the Robin's Nest, a program and home for adolescent girls.

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PHYSICIANS SEEKING LOCATION IN NEW JERSEY

The following physicians have written to the Executive Office of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ANESTHESIOLOGY—Patricia Wood, M.D., 45 Cleveland Lane, Princeton 08540, New Zealand 1960. Subspecialty, general practice. Group, partnership, hospital-based. Available.

Ragaie Z. Kolta, M.D., 12700 Fairhill Road, Cleveland, Ohio 44120. Ein-Shams (Cairo, Egypt) 1960. Board eligible. Group, partnership. Available August 1977.

Kuang Ming Chen, M.D., 130 West 12th Street, Apt. 7-J, New York 10011. Kaohsiung (Taiwan) 1971. Board eligible. Partnership or solo. Available July 1977.

Manjit S. Chowdhary, M.D., 1601 18th Street, NW., Apt. 205, Washington, D.C. 20009. Maulana Azad Medical College (India) Board certified. Group, partnership, solo. Available July 1977.

Rodolfo Villarin Babiera, M.D., 150-72 Village Road, Apt. 104-GA, Jamaica, New York 11432. Cebu (Philippines) 1967. Board eligible. Group. Available July 1977.

CARDIOLOGY—Lalji S. Chudasama, M.D., 49 Murdock Court, Apt. 4-J, Brooklyn, New York 11223. Makerere (Uganda) 1968. Subspecialty, internal medicine. Board certified (IM). Group, partnership, solo. Available July 1977.

FAMILY PRACTICE—Robert Cappa, M.D., 6402 Greyfield Road, Fayetteville, North Carolina 28303. Mt. Sinai (NYC) 1971. Board eligible. Group or partnership. Available July 1977.

Bruce E. Yeamans, M.D., 5025 A Street, Omaha, Nebraska 68106. Creighton 1974. Board eligible. Small group or partnership. Available July 1977.

GASTROENTEROLOGY—Bernard M. Aaron, M.D., 44 Gristmill Drive, Kings Park, New York 11754. SUNY (Downstate) 1969. Subspecialty, internal medicine. Board certified (gastroenterology and IM) Group or partnership. Available July 1977.

GENERAL PRACTICE—Soon Ha Park, M.D., 1359 West 83rd Street, Apt. 302, Cleveland, Ohio 44102. Korea 1964. Group or solo. Available July 1977.

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Wan Soo Chung, M.D., 306 South Main Street, Suffolk, Virginia 23434. Korea 1971. Solo (hospital-based). Available September 1977.

Syed A. A. Shah, M.D., Mailbox No. 8, Bergen Pines County Hospital, Paramus 07652. King Edward College (Pakistan). Any type of practice. Available July 1977.

Marianne E. Carter, M.D., 45-41 39th Place, Apt. 2-D, Long Island City, New York 11104. Buenos Aires 1960. Special interest in pathology. Any type of practice. Available.

HEMATOLOGY/ONCOLOGY—Nancy S. Scher, M.D., 136 Kirkbride Road, Voorhees 08043. University of Pennsylvania 1971. Subspecialty, internal medicine. Board certified (IM and hematology). Hospital-based or group. Available July 1977.

Barry Charles Freeman, M.D., 333 East 75th Street, New York, New York 10021. SUNY (Upstate) 1970. Subspecialty, internal medicine. Board certified (IM and hematology). Group or partnership. Available July 1977.

INTERNAL MEDICINE—Steven Koval, M.D., 3221 Oxford Avenue, Bronx, New York 10463. SUNY (Downstate) 1973. Board certified. Group or partnership. Available July 1977.

Henry A. Schechter, M.D., 3671 Hudson Manor Terrace, Bronx, New York 10463. Einstein 1964. Subspecialty, nephrology. Group or partnership. Available.

Nairvittil Chandrasikharan, M.D., Bergen Pines County Hospital, East Ridgewood Avenue, Paramus 07652. Trivandrum (India) 1962. Subspecialty, cardiology. Board certified, (IM). Any type practice. Available July 1977.

Edward R. Deverson, M.D., 605-S Spinnaker Apts., Sea Isle City 08243. Pittsburgh, 1941. Subspecialty, geriatrics. Institutional, group, or administrative. Available.

Philip Chathampadathil, M.D., 1925 Eastchester Road, Apt. 16-D, Bronx, New York 10461. Trivandrum (India) 1968. Subspecialty, hematology/oncology. Board eligible. Hospital-based solo, group, teaching. Available July 1977.

NEUROLOGY—Hasit R. Thakore, M.D., 100 East 92nd Street, Apt. 5-A, Brooklyn, New York 11212. Municipal Medical School (India) 1968. Board eligible. Group, hospital-based, partnership. Available July 1977.

OBSTETRICS/GYNECOLOGY—N.K. Gupta, M.D., 1650 Selwyn Avenue, Apt. 8-B, Bronx, New York 10457. M.A.M. College (Dehli) 1975. Group, partnership, solo. Available July 1978.

Kuo Juh Chan, M.D., 6152 Parkway Drive, Baltimore, Maryland, 21212. Taipei (Taiwan) 1970. Board eligible. Group, partnership, solo, or hospital-based. Available July 1977.

R. George Cherian, M.D., 3450-21N Wayne Avenue, Bronx, New York 10467. Kasturba (India) 1970. Board eligible. Solo or partnership. Available July 1977.

PATHOLOGY/HEMATOLOGY—Jack Sanford Weinstein, M.D., P.O. Box 368, South Orange 07079. CMDNJ 1966. Board certified (pathology). To associate in hospital practice. Available June 1977.

PEDIATRICS—Shrikrishna K. Mate, M.D., 1945 Corlies Avenue, Neptune 07753. Sethgorhandas (India) 1972. Board eligible. Group, solo, partnership. Available June 1977.

Shrikrishna K. Mate, M.D., 1945 Corlies Avenue, Neptune 07753. Sethgorhandas (India) 1972. Board eligible. Group, solo, partnership. Available July 1977.

Harish B. Kothari, M.D., 28-03 Newtown Avenue, Long Island City, New York 11102. B. J. Medical College (India) 1969. Board eligible. Group, partnership, clinic, emergency room. Available July 1977.

Gupta B. Kuna, M.D., 200 Carman Avenue, Apt. 8-G, East Meadow, New York 11554. S.V. Medical College (Tirupah, India) 1966. Special interest—pediatric endocrinology. Board eligible. Solo practice—general pediatrics. Available June 1977.

Richard E. Manners, M.D., 11801 Monroe Street, N.E., Blaine, Minnesota 55434. Einstein 1975. Board eligible. University-affiliated or group practice. Available July 1978.

Fazal Ahmad, M.D., 100 College Avenue, Apt. 6-S, North Tarrytown, New York 10591. Karachi (Pakistan) 1969. Board eligible. Any type of practice. Available.

PHYSICAL MEDICINE/REHABILITATION—Daniel R. Ignacio, M.D., 17-F Clintwood Drive, Rochester, New York 14620. Far Eastern (Philippines) 1973. Board eligible. Hospital-based practice. Available July 1977.

SURGERY—Narayanan Ponnusamy, M.D., 1770 Grand Concourse, Apt. 7-F, Bronx, New York 10457.

Madurai (India) 1969. Institutional (surgical house officer). Available July 1977.

Luis A. Palma, M.D., 44 Linden Street, Apt. 7-B, Pittsfield, Massachusetts 01201. Cordoba (Argentina) 1968. Board eligible. Any type practice. Available July 1977.

Sang T. Park, M.D., 9324 Pickwick Circle, W. Bldg. 4, Taylor, Michigan 48180. Kyongbuk (Korea) 1968. Board eligible. Group, partnership, solo. Available July 1977.

Eli Anker, M.D., 3450-28 Wayne Avenue, Bronx, New York 10467. Einstein 1972. Subspecialty, vascular surgery. Board eligible. Group, partnership, solo. Available July 1977.

Carlos A. Medina, M.D., 66-53 69th Street, Middle Village, New York 11379. Colombia 1971. Board eligible. Group. Available July 1977.

Mariano S. Morales, M.D., 11 Bernard Street, Port Washington, New York 11050. Philippines 1962. Any type practice. Available July 1977.

M. Mirza, M.D., 3511 Mary Street, Endwell, New York 13760. Dow Medical College (Pakistan) 1967. Special interest, general and vascular surgery. Group, partnership, solo. Available.

Mohammad Afzal Arain, M.D., 1925 Pacific Avenue, Atlantic City 08401. Liaquat (Pakistan) 1969. Board eligible. Group, partnership, hospital-based, salaried. Available July 1977.

Por-Ming Luo, M.D., 10428 South Mason Avenue, Apt. 2-S, Oak Lawn, Illinois 60453. Taipei (Taiwan) 1967. Board eligible. Solo, group, partnership. Available July 1977.

UROLOGY—H. Barry Opell, 1275 East 51st Street, Brooklyn, New York 11234. Lausanne (Switzerland) 1971. Board eligible. Partnership, solo, group. Available.

Sharat C. Kalvakota, M.D., 50 Yonkers Terrace, Yonkers, New York 10704. Gandhi Medical College (India) 1968. Group, solo, or full-time hospital-based. Available July 1978.

P. Satpathy, M.D., 6517 Landover Road, Apt. 102, Cheverly, Maryland 20785. Utkal (India) 1965. Board eligible. Any type of practice. Available July 1977.

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From September 15 to 18 in Atlantic City, the College of Medicine and Dentistry of New Jersey is sponsoring the Third Memorial Ignatz Semmelweis Seminar on Medical Complications in Modern Perinatology. Topics include fetal monitoring in high-risk pregnancy, high-risk fetology, diagnosis of prenatal fetal damage, cardiovascular and hypertensive disorders, feto-maternal physiology and pathology, endocrine and metabolic diseases, and complications in obstetrics. The format includes formal presentations, workshops, and panel discussions. The program has been approved for 25 credit hours in Category I of the AMA Physician's Recognition Award, 32 prescribed credits by the American Academy of Family Physicians, and 35 cognates by the American College of

Obstetricians and Gynecologists. For additional information please communicate with Leslie Iffy, M.D., Program Director, Department of Obstetrics and Gynecology, Martland Medical Center, CMDNJ, 65 Bergen Street, Newark 07107.

Graduate Course in Cytology

The American Society of Cytology, in collaboration with the Canadian Society of Cytology, will hold its 25th Scientific Assembly in Toronto, November 1 to 5. Included will be workshops, round table discussions, a seminar on diagnostic cytology, panel discussions, and the presentation of selected scientific papers. Participation in this meeting is acceptable for 30 hours in Category I of the AMA Physician's Recognition Award. For information please communicate with Warren R. Lang, M.D.,



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Secretary-Treasurer, American Society of Cytology, Health Sciences Center, 130 South 9th Street, Suite 1006, Philadelphia, Pennsylvania 19107.

Graduate Programs Leading to Master's Degree in Public Health

The Division of Maternal and Child Health of the University of California School of Public Health at Berkeley has announced the following graduate programs for pediatricians, obstetricians, and other physicians interested in receiving training in the field of maternal and child health. All the programs lead to the degree of Master of Public Health. Tax-exempt fellowship support is available.

Maternal and Child Health—A 9-month program in health services for mothers and children.

Family Planning—A 9-month program in family planning for maternal and child health specialists.

School Health—A 9-month program in school health for maternal and child health specialists.

Adolescent Health—A 9-month program in adolescent health for maternal and child health specialists.

Perinatology—A 9-month program in maternal and child health as a first step in the field of perinatology.

Comprehensive Care—A 21-month program in the delivery of comprehensive health care of children and youth (ambulatory pediatrics).

Applications are being accepted for groups entering in July or September 1978. For information please write to Helen M. Wallace, M.D., School of Public Health, University of California, Berkeley, California 94720.

Education for Handicapped Children

Project Child Find, a state-wide organization that provides services for unserved handicapped children, birth to age 21, is a large-scale search process aimed at identifying educationally unserved children with handicaps and planning ways in which to provide for their special needs. Many parents are unaware that these services exist and that public agencies are responsible for providing for their children. Project Child Find emphasizes programs available for the pre-school child, diagnostic evaluation, and gives guidance on state-wide programs. A toll-free number (800-322-8174) is in operation Monday

through Friday, 9 a.m. to 5 p.m. for all inquiries.

Experimental Pathology Program

The CMDNJ-Graduate School of Biomedical Science has instituted a new advanced degree program in experimental pathology. The new program, leading to a Ph.D. degree, has received the approval of New Jersey's Board of Higher Education. Concerned with the effects of disease in man, it will prepare students for scientific research in pathology and for teaching.

Camp for Diabetic Children

Camp Nejeda, fully approved by the American Camping Association, is owned and operated by the Camp Nejeda Foundation under the sponsorship of the American Diabetes Association, New Jersey Affiliate, Inc. It provides a healthful, coordinated educational camping experience for children 5 to 15 years of age with diabetes. The weekly fee is \$110 but no child will be denied acceptance because of insufficient funds.

Located in Stillwater, on a 70-acre tract surrounding a spring-fed 13-acre lake, the Camp's facilities include a handsome new multi-purpose lodge, a large arts and crafts center, a modern health center continuously and fully staffed professionally, nine new cabins, nine rustic cabins, a swimming pool, baseball diamond, basketball court, volley ball court, archery range, canoes, rowboats, and kayaks.

For the 1976 season, we had 145 campers (plus a staff of 40)—more than ever, at a time when other camps are showing declining enrollment. Of these campers, 20 percent were unable to pay any fee. Our operating budget was in the range of \$70,000, with camper tuitions supplying approximately 30 percent of this amount. Our \$40,000 deficit must be met with *outside* help. Contributions are, of course, fully tax deductible.

Inquiries should be directed to Mrs. Wm. Levison, Executive Director, Camp Nejeda Foundation, 153 Roseville Avenue, Newark 07107.

MEETINGS OF MEDICAL INTEREST

This listing is compiled through the cooperation of the Committee on Medical Education of The Medical Society of New Jersey, the Academy of Medicine of New Jersey, the New Jersey Chapter of the American Academy of Family Physicians, and the Office of Continuing Medical Education of the College of Medicine and Dentistry of New Jersey. For information on accreditation, please contact the sponsoring organization(s), indicated by italics — last line of each item.

June

Daily Family Practice Residency Program

12 noon — Hunterdon Medical Center, Flemington
(Sponsored by Hunterdon Medical Center and AAFP)

7 Chronic Hepatidities

14 8-9 a.m. — Paterson General Hospital
(Sponsored by Paterson General Hospital and AMNJ)

14 Partial Laryngeal Surgery for Supraglottic Carcinoma

6-9 P.M. — Holy Name Hospital, Teaneck
(Sponsored by Bergen County Society of Otolaryngologists and AMNJ)

14 Arthritis

8-9 p.m. — Shore Memorial Hospital, Somers Point
(Sponsored by Shore Memorial Hospital and AMNJ)

14 Allergy

9 p.m. — Bayonne Hospital
(Sponsored by AMNJ and AAFP)

14 Advances in Obstetrical Ultrasound

7:30-9:30 p.m. — East Orange General Hospital
(Sponsored by N.J. Institute of Ultrasound in Medicine and AMNJ)

14 Comprehensive Course on the Vitreous and 28 Vitreous Surgery

4:30-5:30 p.m. — United Hospitals Medical Center, Newark
(Sponsored by Associated Eye Residencies of N.J. and AMNJ)

14 Chronic Pancreatic Disease

12 noon — West Jersey Hospital, Northern Division, Camden
(Sponsored by West Jersey Hospital, University of Penna. School of Medicine, and AAFP)

14 Endocrine Changes in Menopause

11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
(Sponsored by Kennedy Medical Center)



**What the
osteoarthritic
patient
perceives as
“feeling better”..**

*Please see last page of advertisement
for summary of prescribing information.*

Review of the Literature — Pediatrics

Combined Obstetric and Pediatric Approach to Prevent Meconium Aspiration Syndrome. Carson, B.S. et al.: *Am J Ob Gyn* 126:712 (1976)

Meconium aspiration syndrome is a major cause of morbidity and mortality. Prevention of aspiration post delivery by immediate suctioning has been demonstrated effective. Combining pediatric post-delivery care with intrapartum suctioning was studied. The obstetrician suctioned (using a DeLee) the nasopharynx of all infants when the head presented on the perineum. When compared with previous experience, the incidence of meconium aspiration syndrome was decreased by 90%.

Comment: The "addition of tracheal suctioning prior to delivery of the thorax" significantly reduces the opportunity for the infant to aspirate meconium. *In utero* gasping does not produce meconium aspiration syndrome. Therefore, effective hypopharyngeal cleansing can prevent the syndrome if done prior to breathing. Obstetrical suctioning is apparently successful in doing this. R.H.R.

Prevention of Eczema. Matthew, D. J. et al.: *Lancet* 1:321 (1977)

Infants of allergic parents were divided randomly into two groups. Group I was subjected to an allergen avoidance regimen (breast or soy feedings; no cow's milk, dairy products, fish or eggs; no contact with pets, feathers; antihouse dust measures instituted) for 6 months. Group II was fed and treated conventionally. Group I had significant reduction of eczema as well as less elevation of IgE when compared to Group II.

Comment: This study confirms the classic one by Glaser and Johnstone in 1953. As the *Lancet* editorial writer says: "The message this week is that children born to allergic parents would be better without acquaintance of cow's milk and dairy produce in their first 6 months." This information, coupled with data previously cited (in *Pediatric Newsletter*) supporting breast feeding as *advantageous*, should encourage the primary physician to provide the proper guidance. R.H.R.

Perinatal Implications of the Respiratory Distress Syndrome. Henderson-Smart, D. J.: *Med J Australia* 2:857 (1976)

In Australia there has been a significant fall in the mortality rate of RDS since 1970. However, the incidence has not changed. The persistence could be correlated with an increasing practice of elective (induced) delivery in normal pregnancies with a mistaken gestational age. In 1975, 25% of RDS came from this source with a death rate of 20%. Since modern tools are available for accurate assessment of lung maturity this type of result can be prevented.

Comment: Elective delivery may benefit the obstetrician and possibly the mother, but there is no evidence that it benefits the baby. Determination of the L-S ratio in the amniotic fluid prior to induction will at least reduce the incidence of RDS in pregnancies where induction is indicated (not totally elective). R.H.R.

*Excerpts from CMDNJ Rutgers Medical School *Pediatric Newsletter* (Vol. 1, No. 5, March 1977), Richard H. Rapkin, M.D., Editor. Dr. Rapkin has given *The Journal* permission to reprint this material from time to time.

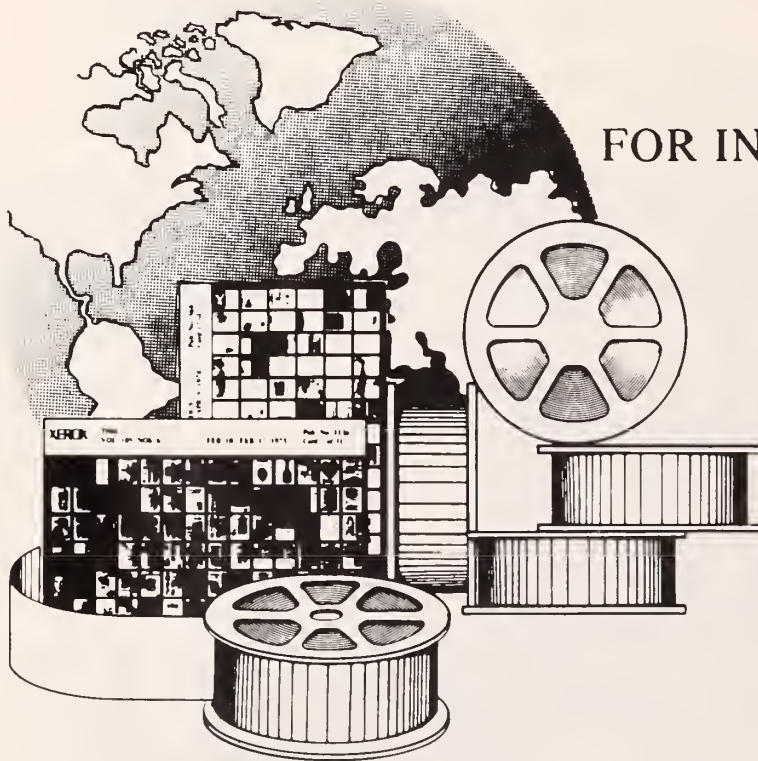
- 14 Pacemakers**
8 p.m. — Paul Kimball Hospital, Lakewood
(Sponsored by AMNJ and AAFP)
- 15 Management of Sexually Transmitted Diseases**
10 a.m.-3:15 p.m. — E.R. Squibb, Inc., Princeton
(Sponsored by Venereal Disease Service Organization and AMNJ)
- 15 Use and Abuse of Steroid Therapy**
1-2 p.m. — VA Hospital, Lyons
(Sponsored by VA Hospital and AMNJ)
- 15 Adult Respiratory Distress Syndrome**
11:30 a.m.-12:30 p.m. — VA Hospital, East Orange
(Sponsored by East Orange VA Hospital)
- 15 Special Rounds, General Surgery and Specialties**
10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
(Sponsored by St. Mary's Hospital)
- 15 Transcultural Psychiatry**
1-2:30 p.m. — New Jersey Medical School, Newark
(Sponsored by CMDNJ and AMNJ)
- 15 Common Medical Problems**
- 22 Radiologic Problems for Family Physicians**
8-9 a.m. — So. Ocean County Hospital, Manahawkin
(Sponsored by Burlington County Memorial Hospital and AAFP)
- 15 Rheumatology**
- 22 9-10:30 a.m. — West Jersey Hospital, Voorhees**
(Sponsored by West Jersey Hospital and AAFP)
- 15 Continuing Medical Education Program**
11:30 a.m. — Rahway Hospital, Rahway
(Sponsored by Rahway Hospital and AAFP)
- 15 Allergy and Immunology**
- 22 7:30-8:30 a.m. — Alexian Brothers Hospital, Elizabeth**
(Sponsored by Alexian Brothers Hospital and AAFP)
- 16 Regressive Behavior in Prisons**
- 23 Fiberoptic Colonoscopy**
- 30 Sleep Disorders**
12 noon — Carrier Clinic, Belle Mead
(Sponsored by Carrier Clinic)
- 16 Medical Grand Rounds**
- 23 9-10 a.m. — St. Elizabeth Hospital, Elizabeth**
(Sponsored by St. Elizabeth Hospital and AAFP)
- 30 Behavior Modification Seminar and Workshop**
- 23 1:30-3:30 p.m. — Trenton Psychiatric Hospital**
(Sponsored by Trenton Psychiatric Hospital and AMNJ)
- 30 Elizabeth Tri-Hospital Hematology Conferences**
8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)



**What the
osteoarthritic
patient
perceives as
“feeling better”..**

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for summary of prescribing information.*

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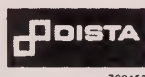
Dept. F.A.
18 Bedford Row
London, WC1R 4EJ
England

- 16 Neurosurgical Conferences**
23 4-5 p.m. — VA Hospital, East Orange
30 (Sponsored by CMDNJ, VA Hospital, East Orange, and AMNJ)
- 16 Postgraduate Symposia in Surgery**
 7:30-8:30 a.m. — West Jersey Hospital, Voorhees
 (Sponsored by West Jersey Hospital, University of Pennsylvania and AAFP)
- 16 Duodenal Ulcer Disease**
 11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
 (Sponsored by Kennedy Medical Center)
- 16 Current Concepts of Addiction**
 5-6:30 p.m. — Somerset Hospital, Somerville
 (Sponsored by Somerset Hospital)
- 17 Thyroid Diseases**
 12 noon — Freehold Area Hospital
 (Sponsored by AMNJ and AAFP)
- 17 Cardiology Conferences**
24 7:30-8:30 a.m. — St. Elizabeth Hospital, Elizabeth
 (Sponsored by St. Elizabeth Hospital and AAFP)
- 18 Advances in Orthopedic Surgery**
25 8:30-10:30 a.m. — N.J. Medical School, Newark
 10 a.m.-12 noon — (Third Saturday Only)
 (Sponsored by CMDNJ and AMNJ)
- 20 Status Asthmaticus**
 10 a.m. — Monmouth Medical Center
 (Sponsored by AMNJ and AAFP)
- 21 Hypertension**
 12 noon — St. Mary's Hospital, Orange
 (Sponsored by AMNJ and AAFP)
- 22 Arterial Blood Gases**
 10:30-12 noon — Passaic General Hospital
 (Sponsored by Hahnemann and AAFP)
- 22 Geriatric Psychiatry**
 1-2 p.m. — VA Hospital, Lyons
 (Sponsored by VA Hospital and AMNJ)
- 22 CAT-Scan in Evaluation of Cancer**
 12 noon-1 p.m. — Englewood Hospital
 (Sponsored by Englewood Hospital and AMNJ)
- 22 Hemorrhagic Shock**
 1:30-3 p.m. — St. Mary's Hospital, Passaic
 (Sponsored by AMNJ and AAFP)
- 22 Special Rounds, Internal Medicine**
 10:30 a.m.-12 noon — St. Mary's Hospital, Passaic
 (Sponsored by St. Mary's Hospital)
- 23 Psychosomia — A Medical Diagnosis**
 11:45 a.m.-12:45 p.m. — Kennedy Medical Center, Edison
 (Sponsored by Kennedy Medical Center)

...you see as effectiveness

The relief of pain
and stiffness
in patients with
osteoarthritis

The improvement
in mobility
in patients with
osteoarthritis



Nalfon®
fenoprofen calcium

Please see last page of advertisement for summary of prescribing information.

AMA Challenges in the Courts

One of the profession's major concerns today is government's mounting pressure for increasing regulation of medicine. In response to these challenges, the AMA has taken a new position of advocacy for physicians and the public which has resulted in the AMA's very first lawsuits against the government.

In March 1975, the AMA took HEW to court over its Utilization Review Regulations which required review of all Medicare and Medicaid hospitalizations within 24 hours. The AMA contended the regulations constituted unlawful interference with the rights of physicians and patients. The AMA won its case and HEW withdrew the regulations.

The AMA also initiated legal action against

HEW's Maximum Allowable Cost Rule, charging that the rule, which would govern the prescription of drugs for Medicare and Medicaid patients, intrudes on clinical decisions made by physicians. The case is now pending.

The AMA has also joined with co-plaintiffs, the state of North Carolina, the state of Nebraska and the North Carolina Medical Society, in a suit against the Health Planning Act of 1974 which gives the Secretary of HEW sweeping powers over nearly every aspect of health care.

These are just some of the many actions the AMA has taken to protect your rights and interests and the rights and interests of your patients. With your support, it can be even more effective.



Join us.

We can do much more together.

Dept. of Membership Development
American Medical Association
535 N. Dearborn St./Chicago, IL 60610

Please send me more information on the AMA
and AMA membership.

Name _____

Address _____

City/State/Zip _____

9 Elizabeth Tri-Hospital Endocrine Conferences
23 8-9 a.m. — St. Elizabeth Hospital, Elizabeth
(Sponsored by St. Elizabeth Hospital and AAFP)

23 New Advances in Ophthalmic Surgery
5:30-6:30 p.m. — St. Mary's Hospital, Orange
(Sponsored by St. Mary's Hospital and AMNJ)

28 Outpatient Management of Tuberculosis
8 p.m. — Warren Hospital, Phillipsburg
(Sponsored by AMNJ and AAFP)

28 Treatment of Rheumatoid Arthritis
12 noon — West Jersey Hospital, Northern Division,
Camden
(Sponsored by West Jersey Hospital, University of
Penna. School of Medicine, and AAFP)

28 Dysentery in India
8-10 p.m. — Englewood Mens' Club, Englewood
(Sponsored by Englewood Surgical Society and
AMNJ)

29 Cardiac Complications of Alcoholism
1-2 p.m. — VA Hospital, Lyons
(Sponsored by VA Hospital and AMNJ)

July

7 Behavior Modification Seminar and Workshop
1:30-3:30 p.m. — Trenton Psychiatric Hospital
(Sponsored by Trenton Psychiatric Hospital and
AMNJ)

14 Controlled Drinking
12 noon — Carrier Clinic, Belle Mead
(Sponsored by Carrier Clinic)

21 Endotracheal Intubation and CPR
12 noon — Carrier Clinic, Belle Mead
(Sponsored by Carrier Clinic)

21 Anticoagulation Principles in Practice
5:30-6:30 p.m. — St. Mary's Hospital, Orange
(Sponsored by St. Mary's Hospital and AMNJ)

23 Newer Concepts in Coronary Care
8-9 p.m. — Warren Hospital, Phillipsburg
(Sponsored by Warren Hospital and AMNJ)

24 Rational Psychopharmacology
1:30-4:30 p.m. — Trenton Psychiatric Hospital
(Sponsored by Trenton Psychiatric Hospital and
AMNJ)

Aug.

9 Kidney Transplant
8-9 p.m. — Shore Memorial Hospital, Somers Point
(Sponsored by Shore Memorial Hospital and AMNJ)

Sept.

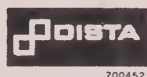
2 Parkinsonism
12 noon-1 p.m. — St. Mary's Hospital, Orange
(Sponsored by St. Mary's Hospital and AMNJ)

For your patients with osteoarthritis,
the recommended initial dosage* is

1 Pulvule® q.i.d.

*The dosage may be adjusted in accordance with the patient's
condition and changes in disease activity.

The most common type of
adverse reaction reported concerned
the gastrointestinal system.
Dyspepsia occurred most
frequently; it was observed
in about one of seven patients.



Nalfon®
fenoprofen calcium

Please see last page of advertisement for summary of prescribing information



Nalfon® fenoprofen calcium

Indications and Usage: Nalfon is indicated for relief of the signs and symptoms of rheumatoid arthritis and osteoarthritis. It is indicated in the treatment of acute flares and exacerbations and in the long-term management of these diseases. The safety and effectiveness of Nalfon have not been established in those rheumatoid arthritis patients who are designated by the American Rheumatism Association as Functional Class IV (largely or wholly incapacitated with patient bedridden or confined to wheelchair, permitting little or no self-care).

Contraindications: Nalfon is contraindicated in patients who have shown hypersensitivity to it.

Because the potential exists for cross-sensitivity to aspirin and other nonsteroidal, anti-inflammatory drugs, Nalfon should not be given to patients in whom aspirin and other nonsteroidal, anti-inflammatory drugs induce the symptoms of asthma, rhinitis, or urticaria.

Warnings: Nalfon should be given under close supervision to patients with a history of upper-gastrointestinal-tract disease and only after the Adverse Reactions section has been consulted. Gastrointestinal bleeding, sometimes severe, has been reported in patients receiving Nalfon.

In patients with active rheumatoid arthritis or osteoarthritis who also have an active peptic ulcer, attempts should be made to treat the arthritis with nonulcerogenic drugs. If Nalfon must be given, the patient should be under close supervision for signs of ulcer perforation or severe gastrointestinal bleeding.

In subacute and chronic studies in rats, Nalfon caused interstitial nephritis, glomerulonephritis, and renal papillary necrosis. These abnormalities were dose related and began to appear at doses approximating the human dose. In chronic studies in monkeys, interstitial nephritis also occurred following administration of Nalfon. Although this was seen at doses considerably above the human dose, lower doses were not studied in this species. During the course of the clinical trials, one patient developed bilateral suppurative pyelonephritis, underwent laparotomy, went on to renal failure, and died with a diagnosis of septicemia and renal papillary necrosis. It is not known whether these events were drug related. A few patients developed mild elevations of the BUN during therapy with Nalfon. Since Nalfon is eliminated primarily by the kidney, the drug should not be administered to patients with significantly impaired renal function. It is desirable to perform periodic renal function tests in all patients receiving Nalfon.

Precautions: In chronic studies in rats, high doses of Nalfon caused elevation of serum transaminase and hepatocellular hypertrophy. In clinical trials, some patients developed elevation of serum transaminase, LDH, and alkaline phosphatase which persisted for some months and usually, but not always, declined despite continuation of the drug. The significance of this is unknown. It is recommended that periodic liver function tests be performed in patients receiving Nalfon and that the drug be discontinued if abnormalities occur.

The safety of this drug in pregnancy and lactation has not been established, and its use during these events is, therefore, not recommended. Reproduction studies have been performed in rats and rabbits. When fenoprofen was given to rats during pregnancy and continued to the time of labor, parturition was prolonged. Similar results have been found with other nonsteroidal, anti-inflammatory drugs which inhibit prostaglandin synthetase.

In-vitro studies have shown that fenoprofen, because of its affinity for albumin, may displace from their binding sites other drugs which are also albumin bound, and this may lead to drug interaction. Theoretically, fenoprofen as well as other nonsteroidal, anti-inflammatory agents, could likewise be displaced. Patients receiving hydantoin, sulfonamides, or sulfonylureas should be observed for signs of toxicity to these drugs. In patients receiving coumarin-type anticoagulants, the addition of Nalfon to therapy could prolong the prothrombin time. Patients receiving both drugs should be under careful observation.

In patients receiving Nalfon® (fenoprofen calcium, Dista) and steroid concomitantly, any reduction of steroid dose should be gradual to avoid the possible complications of sudden steroid withdrawal.

Patients with initial low hemoglobin values who are receiving long-term therapy with Nalfon should have a hemoglobin determination at reasonable intervals.

Peripheral edema has been observed in some patients taking Nalfon; therefore, Nalfon should be used with caution in patients with compromised cardiac function.

Studies to date have not shown changes in the eye attributed to administration of Nalfon. However, because of adverse eye findings in animal studies with some other nonsteroidal, anti-inflammatory drugs, it is recommended that ophthalmologic studies be carried out within a reasonable period of time after chronic therapy with Nalfon has been started and at periodic intervals thereafter.

Since food decreases the blood levels of Nalfon, the drug should be given thirty minutes before or two hours after meals during the daytime.

When phenobarbital, which may enhance the metabolism of Nalfon, is added or withdrawn, dosage adjustment of Nalfon may be required.

Caution should be exercised by patients whose activities require alertness if they experience central-nervous-system side-effects from Nalfon.

Since the safety of Nalfon in patients with impaired hearing has not been established, these patients should have periodic tests of auditory function during chronic therapy with Nalfon.

Nalfon decreases platelet aggregation and may prolong bleeding time. Patients who may be adversely affected by prolongation of the bleeding time should be carefully observed when Nalfon is administered.

Adverse Reactions: Digestive System—The most common type of adverse reaction concerned the gastrointestinal system. Dyspepsia occurred most frequently, being observed in about one out of seven patients. Other adverse reactions, in descending order of frequency, were constipation, nausea, vomiting, abdominal pain, anorexia, occult blood in the stool, diarrhea, flatulence, and dry mouth.

Three instances of peptic ulceration and/or gastrointestinal hemorrhage that may have been due to the drug and four instances in which drug relationship was questionable were observed in 3,391 individuals to whom the drug was administered for periods of time ranging up to 165 weeks.

In less than 2 percent of patients, the drug was discontinued because of adverse gastrointestinal reactions.

Skin and Appendages—The most common adverse effect was pruritus, which was seen in about one out of ten patients. Other adverse reactions were rash, increased sweating, and urticaria.

In about 1 percent of patients, Nalfon was discontinued because of an adverse effect related to the skin.

Nervous System—The most frequent adverse reaction observed was somnolence, which occurred in about one out of seven patients. Other adverse effects, which occurred less frequently, were dizziness, tremor, confusion, and insomnia.

Nalfon was discontinued in less than 0.2 percent of patients because of these side-effects.

Special Senses—The most common adverse reaction was tinnitus, which was seen in about one out of ten patients. Other reactions observed, in descending order of frequency, were blurred vision and decreased hearing.

In about 0.2 percent of patients, Nalfon was discontinued owing to adverse effects related to the special senses.

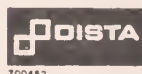
Cardiovascular—The most frequent adverse effect observed was palpitations. This was noted in about one out of twenty-five patients. Tachycardia was observed less frequently.

In less than 0.5 percent of patients, Nalfon was discontinued as a result of cardiovascular adverse reactions.

Laboratory—Anemia was noted in about one out of 500 patients. Therapy with Nalfon had to be discontinued in one patient because of anemia. Increase in alkaline phosphatase, LDH, and SGOT was observed (see Precautions).

Miscellaneous—Headache was seen in about one out of seven patients. Less frequently observed, in descending order of frequency, were nervousness, asthenia, dyspnea, peripheral edema, fatigue, malaise, and dysuria. [031677]

Additional information available to the profession on request



Dista Products Company
Division of Eli Lilly and Company
Indianapolis, Indiana 46206

700452

OBITUARIES

Dr. Leonard G. Carusi

On March 26, Leonard G. Carusi, M.D., a member of our Morris County component, died suddenly. Born in 1910 and graduated from the University of Siena in 1939, Dr. Carusi practiced general medicine in Paterson for many years before moving to Morristown in 1964. He had been associated with St. Joseph's Hospital in Paterson and with All Souls Hospital in Morristown, and more recently with Riverside Hospital in Boonton. He had been active in civic affairs and was school physician in Paterson. Dr. Carusi served for four years in the Department of Medicine of the United States Army during World War II.

Dr. Philip L. Costa

Philip L. Costa, M.D., of Red Bank, a member of the Monmouth County Medical Society, died suddenly on March 11. A graduate of Hahnemann Medical College, class of 1937, Dr. Costa practiced general medicine in Red Bank for many years. He had been affiliated in the pediatrics departments with the Monmouth Medical Center in Long Branch and Riverview Hospital in Red Bank. Dr. Costa was 67 years old at the time of his death.

Dr. Arthur D. Devlin

One of Essex County's well-known surgeons, Arthur D. Devlin, M.D., of Newark, died at his home on April 10. Born in 1909 and graduated from Temple University School of Medicine in 1936, Dr. Devlin pursued a career in orthopedic surgery following graduate work in that field at the University of Pennsylvania. He had practiced in Newark for over 30 years, was board certified in his chosen specialty and a Fellow of the American College of Surgeons. Dr. Devlin was on the attending staff in the department of orthopedics at Babies' Hospital, Presbyterian, St. James and St. Michael's Hospitals in Newark, and St. Mary's Hospital in Orange. He was a member of the American Academy of Orthopedic Surgeons and was clinical professor of orthopedics at New Jersey Medical School, CMDNJ.

Dr. Victor M. Kimel

Victor M. Kimel, M.D., a Passaic surgeon, died at his home on March 30 after a long illness. Born in Vienna in 1925, Dr. Kimel emigrated to Canada as a youth and came to Massachusetts for his undergraduate education at Harvard University. He received his medical degree from Johns Hopkins University Medical School in 1951 and pursued residencies in general surgery and in thoracic and cardiovascular surgery at Massachusetts Memorial Hospital, the Veterans Administration Hospital in Sunmount, New York, and Hahnemann Hospital in Philadelphia. Dr. Kimel was board certified in surgery and in thoracic surgery and was a Fellow of the American College of Surgeons. His hospital affiliations included Hackensack, Beth Israel, Passaic General, and St. Mary's in Passaic, Saddle Brook General, and Chilton Memorial in Pompton Plains. Dr. Kimel served in the United States Army during World War II and, after receiving his medical degree, as a medical officer in the United States Air Force.

Dr. Milton E. Kirkpatrick

One of Monmouth County's senior members, Milton E. Kirkpatrick, M.D., died in Vero Beach, Florida on March 19. Born in Chicago in 1894, he was graduated from Nebraska University School of Medicine, class of 1920. Before retiring to the Bahamas and to Florida, Dr. Kirkpatrick was affiliated with Monmouth Medical Center in the Department of Psychiatry. He had come to New Jersey in 1959 after practicing for many years in Nebraska. He was board certified in psychiatry and neurology and was a member of the American Psychiatric Association.

Dr. G. Conde Lawsing

Word has just been received of the death on January 16 of G. Conde Lawsing, M.D., an emeritus member from the Hudson County Medical Society. Dr. Lawsing was graduated from Columbia University College of Physicians and Surgeons in 1912 and practiced general medicine in Hudson County for many years. He had been affiliated with North Hudson Hospital in Weehawken. Dr. Lawsing retired in 1968 and moved to Texas and more

recently to Syracuse, New York. He was 93 years old at the time of his death.

Dr. Samuel Orloff

One of Essex County's senior members, Samuel Orloff, M.D., died at his home on March 25. Born in Russia in 1894, and graduated from the Medical School of Lausanne in 1919, Dr. Orloff practiced general medicine in Newark for 47 years. He had been affiliated with Martland, Beth Israel, and Presbyterian hospitals in Newark.

Dr. Howard C. Pieper

One of the founders of the Bayshore Community Hospital in Holmdel, Howard C. Pieper, M.D., a member of our Monmouth County component, died at the hospital on April 14. Born in 1907 and graduated from the University of Iowa College of Medicine in 1932, Dr. Pieper first established a practice in pediatrics in Long Branch. Following six years as flight surgeon with the United States Navy during World War II, he resumed practice in Keyport and remained there until 1967 when he accepted appointment as director of student health at Lehigh University. He returned to Monmouth County in 1973 and reestablished his pediatric practice until retirement in 1976.

Dr. Stephen A. Steele

At the grand age of 81, Stephen Andrew Steele, M.D., an emeritus member of our Society from Union County, died on April 18 at Lakes Region General Hospital in Laconia, New Hampshire. A native of Budapest, Dr. Steele earned his medical degree from the University of Budapest in 1918 and took his internship and residency in that city. He emigrated to the United States in 1924 and three years later came to Linden to practice general medicine. He was associated with Alexian Brothers and St. Elizabeth hospitals in Elizabeth and was active in community affairs as a member of the board of health and fire surgeon in Linden. Dr. Steele had retired to North Woodstock, New Hampshire in 1959.

Dr. Leslie M. Townsend

One of Union County's senior members, Leslie M. Townsend, M.D., died on March 6 in

Morris, Connecticut, where he had been living since retiring in 1972. A graduate of New York University School of Medicine, class of 1932, Dr. Townsend practiced internal medicine in Roselle Park for many years and was affiliated with Elizabeth General and Rahway Hospitals. He was board certified in internal medicine and a Fellow of the American College of Physicians.

Dr. Henry S. Urbaniak

On April 4 one of Trenton's prominent physicians, Henry S. Urbaniak, M.D., died of a heart ailment at Helene Fuld Medical Center where he had been associated for 44 years. Born in 1908 and graduated from Hahnemann Medical College, class of 1932, Dr. Urbaniak pursued graduate training in orthopedic surgery at Massachusetts General Hospital in Boston and was associated in that section at Helene Fuld Medical Center in Trenton, ultimately becoming chief of the department. He was active in civic affairs, particularly in the field of education and had been a member of the Trenton Board of Education for 10 years, serving two terms as its president. He was founder and former president of the Trenton Polish Businessmen's Professional Club and had been on the executive committee of the Delaware Valley United Fund. He also was active in the Hahnemann Medical College Alumni Association. Two sons are practicing physicians in other states.

Erratum

Please note that the legend for Figure 2 of the article, "Spontaneous Pneumothorax as a Manifestation of Pulmonary Disease,"—Sokolowski, *et al.* (*JMSN* 74:129) should read "Hematoxylin and eosin: 400 power multiple hemosiderin macrophages and marked alveolar interstitial fibrosis. Also mononuclear inflammatory cells are noted in the alveolar septae."

BOOK REVIEWS

Live Longer Now: The First One Hundred Years of Your Life.

Jon N. Leonard, J. L. Hafer, and N. Pritikin. New York, Grasset and Dunlap, 1974. Pp. 232. (Paperback—\$2.95).

The Live Longer Now Cookbook. Jan N. Leonard and Elaine A. Taylor. New York, Grasset and Dunlap, 1977. Pp. 368. (\$12.95).

These two books, products of the Longevity Foundation of America, call attention to two issues that increasingly are recognized as important in nutrition education.

Firstly, they realized that their basic publications on nutrition information do need a companion cookbook. Secondly, they have recognized that diet and exercise are inseparable. Having said that, these books have serious deficiencies. Two examples: The Longevity Foundation is made up of fourteen people from many disciplines whose work was essentially a review of the literature. They do not perform studies. Nevertheless, the authors state that with respect to recommendations for vitamins and minerals, they "are not in complete agreement with the vitamin and mineral dosages of the National Academy of Sciences, whose recommended dosages in some cases appear too high." (p. 107) One wonders how valid that kind of a conclusion might be.

Secondly, their books are based on five commandments: (1) "Don't eat fats or oils," (2) "Don't eat sugar," (3) "Don't eat salt," (4) "Don't eat cholesterol," and (5) "Don't drink coffee or tea." (p. 145) These "commandments" in the 1974 edition were accompanied by a much needed proviso "You cannot live without some fat and some salt." (p. 145) This statement is missing in their 1977 cookbook. On inspecting their "five commandments," their "sixth commandment" might well be "Don't eat."

These books dangerously oversimplify nutritional concepts.
Howard N. Jacobson, M.D.

A New Kind of Joy: The Story of the Special Olympics. James Haskins. New York, Doubleday, 1976. Illustrated. Pp. 121 (\$7.95)

This slim volume—*A New Kind of Joy*—was written to tell the history of and develop the themes of the Special Olympics. It is filled with the kind of vignettes that make the Special Olympics so meaningful. There is a feeling of encouragement and hope which is often absent in popular books about the retarded.

Unfortunately, the author is so enthusiastic in his mission that he tends to rhapsodize what is, for many, a very difficult human problem. For example, on page two, these statements are made: "There is no racism in the world of retardation. There is no hatred. In their place, there are love and trust." He proceeds to suggest that the greater society could learn much from its retarded citizens. Statements such as these, and the other glowing generalizations about special qualities of the handicapped, demean the very process that the Special Olympics were meant to overcome.

If we are to meet the needs of all citizens, it is urgent that we see the special human qualities in each person. We need to see them, however, without undue sentimentality. The individuals who participate in the Special Olympics for the Handicapped are subject to all the vagaries that life brings. This author, by painting a portrait of retarded individuals as less prey to social prejudices, problems, and issues, maintains the myths which keep groups of people apart. One of the greatest benefits of the Special Olympics is the inclusion of the disabled in everyday human events.

Nonetheless, this book has informational value and certainly should serve as a positive force in the development of additional Special Olympic training programs. It also gives the public a greater understanding of the untapped potential, particularly in the athletic area, of retarded individuals.

A New Kind of Joy is certainly worth reading, if the reader can separate the overstated sentimental from the truly inspirational and informational aspects. In other words, as an Olympic participant put it in one of the delightful drawings included, reading this book requires "effort, courage, honesty, courteous sportsmanship, and dependable self-discipline."

Joan B. Chase, Ed.D.

Lupus: The Body Against Itself. Sheldon Paul Blau, M.D. and Dadi Schultz. New York, Doubleday, 1977. Pp. 112 (\$5.95).

Though it is not stated, this book must be intended for the lupus patient; certainly it is not for doctors. It is well written—some poor metaphors and usage can be overlooked—and would likely be instructive to the interested and well educated patient, or the patient's relative or friend, who would like more details and explanations regarding the etiology, testing, genetics, new theories, treatment, and so on. The physician-writer authorship team has done a commendable job, and the book can be recommended to the interested layman by the physician who is too busy to explain this condition personally. The cost is high and a paperback edition would be more useful.

Norman Riegel, M.D.

The Diabetic's Sports and Exercise Book: How to Play Your Way to Better Health. June Biermann and Barbara Toohey. New York, Lippincott, 1977. Pp. (\$10.95—hard cover; \$5.95—soft cover)

The Diabetic's Sports and Exercise Book should be recommended to all diabetics, but especially those in the young and middle years. It is an easy-to-read paperback book which gives a lot of encouragement and sensible advice to patients with this life-long disorder of metabolism.

The book reviews the personal experiences of many individuals including athletes, entertainers, businessmen, students, and so on, and makes exercise sound like fun. Both recreational and conditioning exercises are described. A useful appendix contains several tables, including maximum heart rate recommended by age group, a chart of calorie expenditures for light, moderate, and vigorous activity, and a list of readily available blood-sugar-raising snacks.

Physicians who treat patients with diabetes might appreciate a reference copy in their consultation room.

Arthur Krosnick, M.D.

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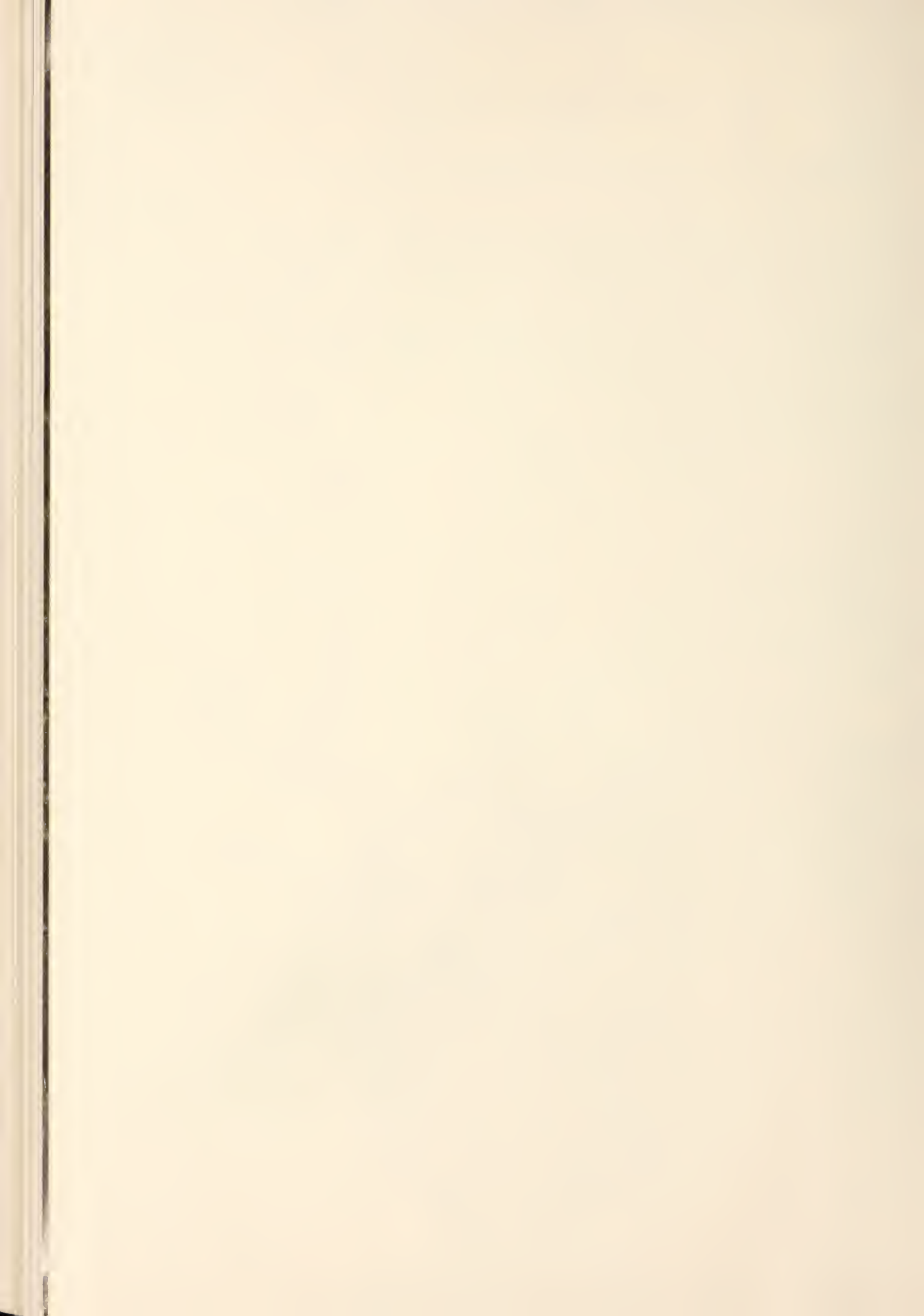
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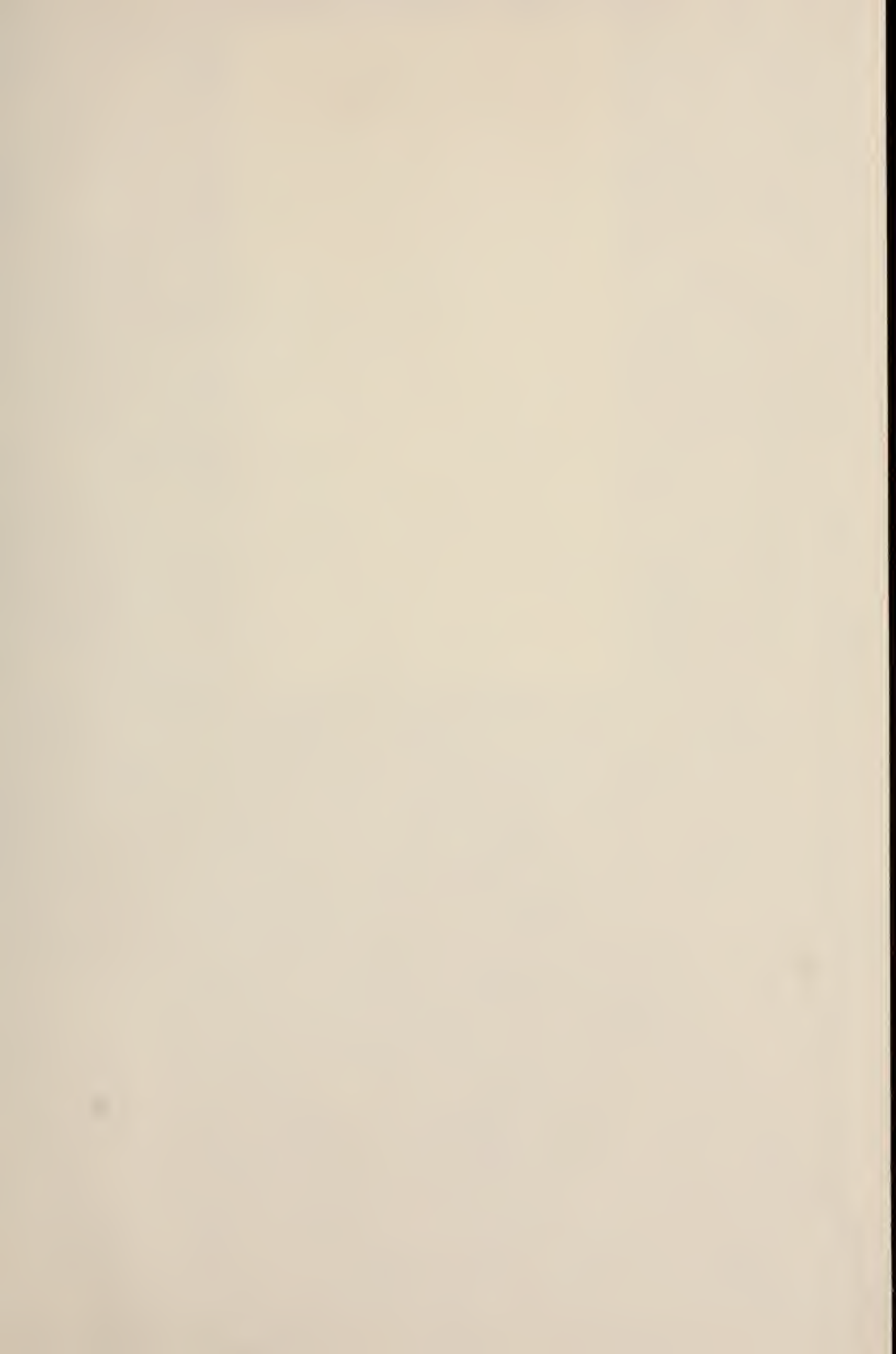


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